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# The American Journal of Clinical Medicine

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## The Spirit of Victory

The Governor of one of our great states had determined upon a measure which should revolutionize the educational system of his commonwealth. He sent out his lieutenants to investigate its feasibility. Their work completed, he summoned them all to his office. One by one they gave their opinions, all adverse to the plan. It was impossible to carry out this scheme of educational reform. The time was inopportune. He would antagonize powerful interests. The people were not ready for it.

When all were through, the Governor rose to his feet, determination written in every line of his fine face. Said he: "I thank God for my uncompromising soul."

---

Nothing worth while in this world is ever done without this uncompromising spirit, undaunted by opposition, determined upon victory. Every truth invites opposition, contempt, contumely; but if it really be truth it is worth fighting for. Remember this, my fellow workers, and fight on!

SEPTEMBER 1907

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Our Ethics: Think Right, Feel Right, Be Right, "Live and Let Live," Do the Square Thing, Have a Conscience and Use It.

# The American Journal of Clinical Medicine

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# SUCCESS PHILOSOPHY FOR TODAY

A little cheerful optimism, with some encouragement which may be read on the days when business is poor, and that may help in the doctor's life-long struggle for success

THE talented Dr. Palmer, editor of *The Chicago Clinic and Pure Water Journal*, is a constructive philosopher in whose "Mumblings of a Mournful Medic" we find the following aptly put truth: "An indulgent smile at the newer ideas of others is usually a pathognomonic sign of a hypertrophic bump of egotism." And, "just so!" say we.

There are many members of the medical profession who have the "indulgent smile." They havn't acquired a really new uplift idea since they were graduated from a medical college. They have not advanced an inch. Their methods of diagnosis and treatment are the same as they were twenty-five or more years ago and yet they pooh-pooh, with "an indulgent smile," any advance which would bring them out of the rut. Many of them don't know they are in a rut; others are dimly conscious of the fact, but they have been so long treading the same old path, and the habit is so firmly fixed, that it is with great difficulty they can overcome it. To such men I would give the advice of the young philosopher, Chimmie Fadden: "When a fellow begins to find out de rut he's in, it's up to him for him to climb out. If he don't get a move on him, then he can't climb over nohow, and dat queers his nerve."

These doctors with the "pathognomonic signs" will tell you that "the old way is good enough for me." There are too many people in this world who practise the old adage: "Let well enough alone." They do not try to improve themselves nor the existing conditions. Such people are not doing the best they can. "Let well enough alone" has lost caste among progressive people. It is conservatism enthroned, inertia crystallized. Deference to it has always handicapped the progress of the race.

To settle down to contentment with only "well-enough" things accomplished and "well-enough" things about you, is physical, mental, moral and psychic surrender; it is vital, ethical and intellectual stagnation.

Do not be afraid to outgrow old thoughts and ways of practice. Be courageous and independent and try to think and practise on new lines. You should not hesitate to change your methods, if you are pretty sure you see a better way. The object of life is to grow. True progress in any line

of work consists in bringing forward from yesterday the good of yesterday and adding it to the store of the good of today. The act of seizing on every bit of knowledge, every scrap of information, no matter how insignificant it may seem at the time, the laying hold of every opportunity and every occasion, and grinding them all up into experience, cannot be overestimated.

Some doctors cannot get out of the habit of old methods of treatment. If they are good methods, they should not "get out of the habit;" but it is quite possible for conventional rules of action and conventional habits of thought to get such power over one that progress is impossible. A doctor who is satisfied with everything he does has reached his culminating point. He will progress no more. You ought not to be satisfied with anything that can be improved. To succeed we must be prepared to seize and improve the opportunity when it comes. The successful man is he who sees the changes coming and accordingly adjusts himself to them. Wide-seeing and far-seeing, and an open and clear eye, produce results. This is as true in the practice of medicine as in anything else.

Work your brain. Thinking leads to knowledge. You may see and hear and read and learn as much as you please. You will never *know* any of it excepting that which you have thought over, and which by thinking over you have made the property of your mind. The man who dares to think for himself and act independently does a service to his race. As the world always makes way for the man with a will, so it always makes way for an independent thinker. All reforms must have an initiative and the indispensable prerequisite is to get the people to think.

In the evolution of your powers do not think of yourself alone. If you succeed in the practice of medicine, if you have learned by experience any good treatment for any condition, let others know of it. We should all work together for a better therapy. Man is made for cooperation. Savages unite only in war. Civilized people unite in work. The evolution of association is the evolution of civilization. If you discover anything good let the profession know of it. There is always need of persons who not only can discover new truths and show us when what once were truths are truths no longer, but also for those who will commence new practices.

Search out the things that might be done better. No therapy is so perfect in detail that there is no room for improvement. Be original if possible in your methods and lead rather than follow. Originality is at a premium. The world makes way for the man with a new idea. The doctor as well as every other man who makes a success in life never waits for the crowd. He strikes out for himself. It takes nerve—it takes a great lot of pluck, but the man that succeeds has both. Pluck clears the track. People get out of the way of an energetic man. Make it the object of your life to look for and avail yourself of the best remedies and the best methods of treatment. Press close after leaders and be a leader yourself. Do not wait for the crowd. Be one who recognizes a good thing and who uses it. The doctor who is useful is the doctor who is successful, and the most useful doctor is the one who can relieve and cure his patients.

Accuracy in everything should be attempted, as it is a badge of merit, and of the utmost importance are accurate, dependable remedies. Any physician with a reputation for accurate practice will gain the confidence of the people and win his way, where another with careless habits will fail. Place no limit on your ambition, since the field is free to all, and remember that work is always the price of progress.

It may not be possible for you to be the best doctor in your community, but you can be among the best. Success is often due less to ability than to enthusiasm. One of the greatest elements of success is a firm faith in your ability to succeed. Believe firmly that if you do not find the way you can make one, and you will triumph. Learn to look at the bright side. Keep the sun-

light of lively faith in your heart. Do not let the shadow of discouragement and despondency fall on your path. It is surprising how much help the hopeful optimistic doctor can carry to others, and how much cheerfulness contributes to success.

If you would succeed up to the limit of your possibilities, be constantly of the belief that you are success-organized, and that you will be successful no matter what opposes. If you do not succeed to the extent you think you ought to, and sometimes imagine that you are a failure, remember that failure is only endeavor temporarily off the track. Men of mettle turn disappointments into helps. No one is ever beaten unless he is discouraged. Do not be afraid of competition. The doctor should always have enough competition to keep the edge-tools of his mind sharp and bright. There is no possible success without some opposition as a fulcrum. Force is always aggressive and crowds something. A man's enemies are often the making of him. Possibly your enemy has some ideas which you need. It is always safe to learn even from your enemies. It is not always the original investigator who is the best doctor, but the one who is able to cull the best ideas from those with whom he comes in contact. Your reception of new ideas not only adds to the stock but modifies the old. Ideas are living principles that act and react like chemicals on each other, producing fresh compounds in the mind, but their force does not end in thought; it is reproduced in action. So it is necessary to hustle. Industry is the mother of content. While content is not a lazy indifference, it is equally removed from stoicism.

Be content but not satisfied. Contentment is not an easy indifference, a stupid slumber, or forced submission to the inevitable. It is an active thing. Above all be an optimist, and you can become an optimist by living an active life, intent on the progress you can accomplish. Every optimist belongs to the assets of his race. Every pessimist is a dead loss. Do not worry because you have not been through Harvard and the medical department of the Johns Hopkins University, or served as interne in one of the largest hospitals in the country or as an assistant for two or more years to some foreign professor with a name you can pronounce only with a sneeze. These things are not everything.

It is true that a man is more or less handicapped without a thorough schooling, but mere schooling will never give him common-sense. It is a great thing to have brains, but it is vastly greater to be able to command them. The world wants men who have not so much uncommon sense that they have no common-sense, as men who can mix brains with their work. Good roundabout common-sense has never been superseded by the college diploma. It does not matter how much you know or how much talent you have; if you cannot transmute your acquirements into practical power, you will be a failure.

What success we have had has been due to the fact that we had a good idea, put it into practical use and persevered regardless of all opposition. We do not get thrown into a panic by criticism; we are not subject to fainting fits. In our book of tactics there is no such word as retreat. "Forward" is on every page. When we see that we are on a wrong lead we shift quickly, but always to go ahead. We know nothing about backward movements. We do not run at the sight of a foe. We halt only to get breath and then push the harder. We rest only to rise in greater strength. We may have to go slowly at times, but we go, counting every knock a boost. Mountains of difficulty have been against us, but we knew how to climb; now they are on the other side and we are in the open.

Remember, Brother, that "every winner must have the punch", and that the chief difference between success and failure lies in the single element of staying power. The man is too weak, too nerveless, too limpsy for this rough, go-ahead world, who cannot persevere, who hasn't the "push" and the "staying power." Such a man is sure to get left in life's great race.

I know it's not long to New Year's day but it's just as good a time to make resolutions right now, even better, and then when

the orthodox day comes you can pat yourself on the back and say: "That's when I hit it just right."

Whenever the wandering demon of Drunkenness finds a ship adrift,—no steady wind in its sails and no thoughtful pilot directing its course,—he steps on board, takes the helm, and steers straight for the maelstrom. —Oliver Wendell Holmes.

## THE "JUST-AS-GOODS"

In *The Pharmaceutical Era* Edward S. Dawson, Jr., of Syracuse, N. Y., gives some interesting "notes" on the manufacture, by the retail pharmacist, of a few of the new preparations of the United States Pharmacopeia. Inasmuch as at least one of these is an imitation of a well-known proprietary remedy, and in view of the fact that there is now an organized movement to persuade physicians to prescribe these "new" preparations (U. S. P. and N. F.) instead of the established proprietary articles of which they are merely *imitations*, Mr. Dawson's report is of peculiar interest. Below we give his experience with cataplasma kaolini—the official clay paste:

"The formula and process for this preparation yield a fairly satisfactory product, but the variability of the kaolin furnishes a source of much annoyance. On a small scale, say 1000 Gm., the retail pharmacist can make this preparation, if he wants to work hard, so that he can sell it at a good profit. I made up a batch of 2000 Gm. (the actual yield being a trifle more than 4 lbs. av.,) at a cost of 8 cents per pound, figuring the cost only of materials employed, but the work was strenuous and I am not trying to create a demand for this product. On a larger scale than 2000 Gm. the pharmacist requires a hand- or motor-power machine to insure thorough admixture of the ingredients. I have some of the cataplasm that has been made about fourteen months, and it has held together with only a slight separation of the glycerin, but it is of darker color, and is not as sightly as are some of the popular kaolin compounds on the market."

The physician will note with interest that the official preparation, as made by a skilled pharmacist, is claimed to be only a "fairly satisfactory" product; that the "variability" of the kaolin is a source of "annoyance;" that thorough commixture is difficult, requiring in more than four-pound lots motor-power machines; that in spite of Mr. Dawson's care there was "slight separation of the glycerin;" that the product was "not as sightly" as some of the popular kaolin compounds—in a word, the product was an inferior one.

There was only one redeeming feature—the cost. But if we add to the cost adequate remuneration for the pharmacist's labor, it is a question if even that advantage would not have to be disallowed. When we add the personal equation to the manufacture of this product, and remember that one of the picked men of the pharmaceutical profession is reporting this result, while the official products which the average doctor uses are to be made by the *average* pharmacist, the resultant becomes something of an enigma—does it not? Does the physician want to prescribe or use remedies which are enigmas?

## SCIENCE, OR MERE LAZY IGNORANCE?

Time was when the ideal doctor, old, experienced, skeptical, wise in his estimate of human nature, gave "very little medicine," relying largely on his own manner and a conviction that all things usually came right with time and the assurance that that would always be the case. Oh yes, a "prescription"—the patient expects it, and it aids the "con" game we are practising.

Just now some of these worthy gentlemen are somewhat disgruntled because they are being told that this sort of thing won't go any longer, that they are taking their patients' money under false pretenses, that there are such things as drug-remedies that really affect the vital functions, and that they are expected so to exhibit those remedies as to influence these vital functions toward a return to normality of

being and action; and that this is precisely what a doctor is employed for, and what he has been pretending to accomplish.

If recognizing the deviations from a normal standard and so applying remedies as to restore the normal conditions is not the doctor's duty, what in the name of heaven is his function? What does he do to earn his fee? Does anybody deny that in drugs lies the power of influencing the functions of the body? Or that if you know enough of their action you can so apply them as to get this action in a beneficial manner? Then the only reason you do not so use them must be that you don't know how. If so, it is up to you, my dear old friend, to acknowledge the truth and go to school; or, if your dignity will not permit this, get out and make room for the man who will.

Another alternative is to shift the responsibility by calling in aid; but this is really a polite way of deserting the army. Not that we have the slightest opposition to the surgeon—we gladly availed ourselves of his superior skill yesterday, and are happy over the result today—but we can not wonder at his disrespect for the medical branch in general when he finds himself constantly called in to make amends by mechanical measures for our failures to remedy derangements of vital function. No wonder he gets to believe we are powerless and our means and methods worthless. So far as *his* observation of *our* work goes, he is strictly correct in that conclusion. He sees only our failures, deals only with the confessed impotence of internal medicine. Why should he suppose there is anything beyond what comes before his eyes?

Far from finding themselves at outs with the surgeons, we look to them for the most promising future allies. The study of technic is growing wearisome, and the surgeon is turning to that of pathologic physiology. Dead anatomy alone is an insufficient guide to his hand, and he seeks in the living body, in the vital functions, for better light. Here he meets the men who have been studying the same things—the application to these morbid states of remedies from the drug-world; and in so far as these studies have been correctly made, the surgeon must utilize them. On whatever lines men may pursue their search for truth, these lines must converge.

There is a charm in the study of definite remedial agents and their application that is only realized when one has had a certain experience with them, sufficient to render their uses familiar to him. We can not well describe that sense of confidence, of power to control the situation, that comes from knowing exactly what your drug is going to do. Somehow matters look altogether different. No wonder those who have not acquired this viewpoint accuse us of being "enthusiastic," of "believing drugs will cure everything." That is the way it would look to us were we not on the inside. Working with agencies that are exact and unvarying in their effects on the human body, the practice of medicine possesses a fascination that no other pursuit compares with—not even money-getting, for that is a selfish and unsatisfying occupation.

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Where we desire to be informed, 'tis good to contest with men above ourselves; but to confirm and establish our opinions, 'tis best to argue with judgments below our own, that the frequent spoils and Victories over their reasons may settle in ourselves an esteem and confirmed Opinion of our own.

—Sir Thomas Browne.

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## IS OUR KNOWLEDGE OF DRUGS COMPLETE?

In our studies of medicinal agents extending over many years we find a wealth of valuable material. We find innumerable drugs which exert a certain action upon the human body in some way or another, and that these actions can be utilized in the treatment of disease where the special action of each of these drugs appears to be indicated by the pathologic condition present.

Are these facts so generally known to the medical profession that our labors are useless? We confess that with all our work our knowledge of drugs and their actions is exceedingly small, as compared with the truths in these respects which we know to be within the reach of investiga-

tion. Are we the only ignorant men in the medical profession, and does the body of this profession know these things so thoroughly that they can only look with commiseration or contempt on our ignorance? Or has the vast body of the profession practically neglected this study and contented itself with a smattering of knowledge, never pushing investigations home to certainty?

Does the doctor as a rule content himself with giving a prescription containing a number of ingredients, and if he finds the patient is better after taking it, continue the use of that formula in similar cases without giving much thought as to whether the improvement was due to it or not? The action of each of the ingredients in the prescription alone and as influenced by the others, and the applicability of each ingredient to the particular phases of the malady under treatment?

Our intercourse with physicians has been somewhat large, and has embraced every grade of the profession, from the highest to the lowest. If any member of the medical profession has that complete knowledge of medicinal therapeutics which would render such studies as ours superfluous, we have singularly failed to recognize this fact. Either the leaders in the profession are remarkably secretive about their knowledge, or they do not possess it. A typical case illustrating our point is this:

We once consulted the man whom we believed to be the greatest neurologist in America concerning an obscure case in his specialty. The diagnostic study made by him was superb. When we asked about the treatment, he dismissed it with a sneer, saying it had been many years since he had given any consideration whatever to that topic.

Did that signify that there is absolutely nothing to be done in the way of treating disease? Either that, or the gentleman knew nothing about treatment. We cannot admit that treatment is useless. If we did so, there would be no excuse whatever for the existence of the medical profession, and every dollar received by us from our patients is money obtained under false pretenses. We are forced to come to the other conclusion, and that is that the profession in general is not perfect in its knowledge of drugs and their application, and that only by study and investigation can we advance along this line.

Admitting this, we say that the applications of drugs in the treatment of disease present a wealth of resources whose value cannot be estimated, and that the farther we advance in this study, the more we are amazed that it should be neglected by the men who profess to devote their lives to this profession.

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Give me the pleasure of a book,
An ample shade, a running brook,
A piping bird, and splashing trout,
And wild flowers shining all about;
Then even kings would envy me,
So full of joy my life would be.
—Charles T. Lusted.

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## THE RE-STUDY OF DRUGS

The studies of drugs on which our works on therapeutics are founded have been rendered largely obsolete by the advance of physiology. Most of the older observations were limited to watching the effects of these agents upon the circulation, temperature and respiration, and if a drug showed no perceptible action on these functions, and was not an evident stimulant of any evacuant apparatus, it was pronounced "inert."

Another ruling tendency was to class remedies according to their resemblances and ignore their diversities. Thus, all the virtues of the tannin-bearing plants were ascribed to that agency as producing their remedial affects, and the differences in the tannins from various sources was ignored. Even if the effects for which the plant was recommended by clinicians were not those derivable from tannin, if it contained that principle, the more peculiar active-principle content was likewise ignored. This was notably true as to the arbutin-bearing group, in which the true active principle was smothered in an excess of tannin. Only when arbutin had been

isolated were its remarkable values appreciated.

The chemist knows well that the various tannins differ, and that kino-tannin and catechu-tannin are not the same. Are they identical therapeutically? Or are there between them certain diversities that may correspond with similar differences in the clinical symptoms presented in the field of practice, enabling us to apply these different tannins with more of accuracy than of yore?

The aggregation of remedial agents into groups must be followed by the study of the members of these groups individually.

The demands for such study have notably increased. Take echinacea, for instance—many different observers affirm that this is a potent remedy in certain septic states of the blood. Given in health it has not been shown to exert any appreciable effect on the bodily functions. But how about the internal secretions? How about the composition of the urine and the feces while this is being taken? Until such questions have been answered, we take a huge responsibility upon us in stating that any drug is "inert."

There is enough work ready for the student of drug-therapeutics to keep all the teachers of that department busy for twenty years.

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Never suffer youth to be an excuse for inadequacy, nor age and fame to be an excuse for indolence.
—Haydon.

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## DISPENSING AND THERAPEUTIC EXACTNESS

The one thing to be considered above all else in discussing the question of dispensing *versus* prescribing, is the interest of the patient. If we can do better by him in the one way or the other, that should settle the matter. Personally we incline to dispensing; but we realize that others may not feel that way.

We are accustomed to sit down at the bedside and study our case; to seek indications and compare them with the known action of our remedies; to estimate the quantity of each that will probably be required to restore physiologic balance, and to prepare the remedy at once. Of course we could write a prescription, but we are in the habit of dispensing our remedies, where there are more than one, singly; and of telling the attendant to give one of *this* every ten minutes till nausea occurs; one of *that* every half hour till the fever breaks; and possibly one of the third every hour till six doses have been administered; and we have more confidence in our instructions being comprehended when written down in her presence and read to her, and then affixed to each medicine receptacle by ourselves.

When we send to the pharmacist we at once introduce an element of chance that destroys the perfect confidence we would have in the drugs in our case. To us the practice of medicine is not an affair of placeboes, or of suggestion, but a matter of the most accurate and delicately balanced calculation. When things do not go quite as we expected, we overhaul our view of the pathology, and seek for a possible miscalculation—but then it may be that the medicine was wrong! Possibly no more than that the tincture bottle had been insecurely corked, or had been standing in the sun and evaporation had altered its strength. Now, a single possibility we may contend with—two are beyond us. We must have certainty somewhere, and we plant one foot firmly on the absolute sureness of our drug. Then we are prepared to consider the question of our diagnosis, with some assurance that here we shall find the trouble.

Some of us may enjoy a similar confidence in the pharmacist, and we have personally learned to look on him as an upright and qualified man, in the vast majority of instances; but since one did his work just right, while his boy delivered the infants' anodyne to a man with delirium tremens and the hyoscine-morphine combination to a child with a cough, we can no longer say truthfully that we possess the same confidence we have in our own medicine case and its contents.

But if you prefer to prescribe, we know no reason why you should stop writing prescriptions and dispense instead just because

*we* prefer the latter. We must learn to respect the preferences as the beliefs of others and to admit that not one of us, or any number of us collectively, enjoys a monopoly of knowledge or of truth.

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Don't be pessimistic! Get into the fight and do a man's part. There never were so many opportunities as there are today. You hear a heap of fool talk about there being no chances for young men today. Nothing is farther from the truth. Better chances forty years ago? Nonsense! Believe in yourself. Have something definite to do and do it. That's all there is to success in life. —The Circle.

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## LIBELING OURSELVES—AND BEING LIBELED

It is certainly an unfortunate thing that movements intended for the betterment of our profession should so often be so managed as to bring discredit upon it. This is true at the present time of the most commendable efforts to improve the quality of instruction in our medical schools. Since the publication of the official statement that a great number of our medical schools are inefficient and a large portion of our medical graduates "not fit to practise medicine," many newspapers have taken the matter up editorially, and there is now hardly a place in the country where this libel of the doctor has not been put into the hands of his patients by the ever-busy quack manufacturers who distribute his dope to the laity, either direct or through the greedy channels of trade.

It *is* true that the physician is not all that he should be, or wants to be, and that the instruction in many medical schools leaves much to be desired. But while admitting this, equal emphasis should be given to the great progress that is being made in medical education. If it is necessary that the laity should know our weakness, it is a matter of equal justice that they should know our strength. Why not tell, through the public press, of the development of our schools and the rising standard of medical practice during recent years? We make this suggestion to those of our profession who are *en rapport*, apparently, with the newspaper press.

When we consider that only fifteen years ago the two-year college course was still in operation, and that the average actual time devoted to college-work has increased more than five times while the educational requirements for admission have been raised from the three R's—or less—to a four-years' high-school course as a minimum, something of what has been done *ought* to be appreciated. It is a matter of undoubted fact that the course of study in even the poorest medical college is better today than it was in those now thought the best fifteen years ago. Furthermore, the education of the medical man will stand favorable comparison with that of any other professional man—lawyer or clergyman for instance. It is a little amusing that the one profession whose journals and best-known representatives have taken it upon themselves to berate the doctor most, accusing him of "ignorance," "incompetence," etc., is the one in which the educational requirements are of the very slightest—to wit, pharmacy.

Altogether too much belittling and abuse is being showered upon the doctor—abuse that is not warranted by fact and too often based upon the ill-timed and ill-mannered criticism of members of our own profession, as well as the enemies thereof. The average American doctor is *not* the degraded, ignorant thing that he too often is painted. Intellectually he is more than on a par with his fellows; culturally he is way above the mass; socially he does or should fit into his environment; professionally he is an able, resourceful man—not as good a man as he should be, but all the time growing better.

Meanwhile let all our superior men join hands in the effort to make him a better doctor—not forgetting that there are many things to be learned, even of the "cross-roads" doctor. And let *all* physicians, whoever they are, wherever they are, of whatever school, join hands in resenting these dangerous, insidious attacks upon us, which help medicine not at all, but which do place ammunition in the hands of the enemy, while weakening or destroying the

doctor's influence with his patients. There should certainly be harmony within our own ranks.

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We are firm believers in the maxim that, for all right judgment of any man or thing, it is useful, nay essential, to see his good qualities before pronouncing on his bad. —Carlyle.

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## A LAW AGAINST SUBSTITUTION

At its last session, the legislature of the State of New York passed a bill which will, it is hoped, put an end to the misbranding of drugs, medicines and food products, and make the practice of substitution if not impossible at least too expensive to be profitable within that state. This bill has received the endorsement of the governor and will go into effect the first of September.

By the terms of this bill any person who in putting up any food, drug or medicinal preparation "puts any untrue label, stamp or other designation of contents" upon any package containing it, or who "substitutes or dispenses a different article for or in lieu of any article prescribed, ordered or demanded" or who "puts up a greater or less quantity of any ingredient specified in any such prescription" will be guilty of a misdemeanor. Upon conviction for a second offence he may be imprisoned for not less than ten days or more than one year, and fined not less than $10.00 or more than $500.00. Upon a third conviction an offending druggist may be deprived of his license and disqualified for further engaging in the drug business.

The passage of this law is due largely to the energetic efforts of Charles Roome Parmele of New York, who has been working to this end for at least five years. The law it a good one and we hope will be rigorously enforced. No man who believes in absolute honesty in the dispensing of medicine can object to it, and yet we understand that there has been a hard fight to prevent the passage of this bill on the part of men who should stand for and endorse every method of protecting the patient from imposture through the misbranding of goods and the substitution of inferior articles. The law is simply another expression of the need of the times for the "square deal." We hope it may be extensively copied in other states.

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## UTEROOVARIAN REMEDIES

In *Ellingwood's Therapeutist* for July we find a table containing some studies on the group of remedies affecting menstrual and other of the affections of the female genital apparatus. Although the data are obtained from observations made in the sick-room on sick human beings and not in a laboratory on guinea-pigs or rabbits, they may still be found to contain some hints of value as leading to further investigation.

We quote:

*Viburnum Prunifolium* (*Viburnin*).—Mild nerve sedative and antispasmodic; relaxes muscular and reflex irritability, relieves the nervous irritation of pregnancy, tones and soothes all the female genital organs, quells sympathetic disturbance from uterine irritation, and overcomes sterility. Indicated in spasmodic dysmenorrhea, nervous and sympathetic irritations, and persistent irregularity of menstruation, as to time or quantity. The best remedy to prevent miscarriage, in full doses frequently repeated; for habitual abortion—reliable unless membranes are ruptured; in habitual cases give early and until the perilous time is well past. (Viburnin, gr. 1-3 every half to one hour, regulated by the pains, is a fairly effective dose.) Given before labor commences it soothes nervous irritations and pains, prevents morning sickness and induces a cheerful, hopeful state of mind, besides preventing accidents. During labor it promotes normal conditions, regulates muscular action and prevents hemorrhages. After labor it aids in restoring normal tone and capillary circulation, preventing subinvolution, prolapsus and other malpositions. It is also of value in irregular menstruation, at the menopause, especially when occurring during fever when uterine inflammation of sepsis is threatened. (The essential action may consist in muscular and vascular relaxation.)

*Helonias Dioica* (*Helonin*).—Is a pronounced tonic in general relaxation and feebleness of uterine structures; specific for prolapsus with dragging sensation in lower pelvis; pelvic engorgement with prolapsus; adjuvant in menstrual ails, irregularity from displacement, engorgement or frequent labors; relieves the reflex disturbances incited by uterine disease; for miscarriage it is only useful in preventing the conditions that incite habitual abortion. Adjuvant as *partus præparator* [preparing the parts], useless in labor, tonic like viburnin after labor. It gives relief in phosphaturia and uricacidemia, albuminuria with liver disorder, gastric or hepatic affections during pregnancy. (The editor has found helonin almost invariably effective in spasmodic dysmenorrhea, even in cases that had induced the morphine habit. Give one grain every hour, in a tablespoonful of hot water.)

*Senecio Aureus* (*Senecin*).—For atonic, relaxed uterine states, general laxity, misplacements therefrom, passive congestions with debility; overcomes sterility by stimulating ovaries; acts on central nerves. Used to promote menstrual flow in atony, preventing the excess that occurs with relaxation, if given during flow and intervals for some three months. Adjuvant in threatened premature uterine action. Previous to labor, indicated only by extreme atony; not used in labor; after labor promotes uterine contraction, restores suppressed lochia, and checks hemorrhage. Prolonged administration is necessary to develop its action. (Give senecin, a grain or two four times a day, for three months.)

*Cimicifuga Racemosa* (*Macrotin*).—Mild muscular and nerve sedative; eases muscular pains or soreness; regulates nerve-action by increasing centric control; useful in menstrual disorders with muscular aching or soreness and cool skin, amenorrhea with like symptoms, congestive dysmenorrhea—best if vasodilators are added; in menorrhagia, metorrhagia and menstrual ails of young girls. In threatened miscarriage it acts like ergot. As a *partus præparator* it is the most-used remedy, but not as good as mitchella. It eases erratic pains and irregular ailments, soothes hysteria and muscular irritation, especially rheumatic or neuralgic (specifically myalgic), and conduces to easy labor, during which it regulates and strengthens the pains, soothes the nerves and prevents hemorrhages. After labor its effects are still to relieve muscular pains and by sustaining normal uterine contraction to prevent hemorrhages, subinvolution and displacements. It cures leucorrhea from relaxation or hypertrophy. It is also of value in fevers, malaria and urinary inflammations. (Macrotin is of value in chorea and myalgia, being one of the three remedies known to affect directly muscular tissue. Give gr. 1-6 to 1-2 every hour in acute cases; one grain four times a day in chronic forms.)

*Aletris Farinosa* (*Aletrin*).—For extreme weakness of the reproductive organs, from overwork, sexual excess or too frequent labors; displacements therefrom; improves digestion and assimilation. For irregular and too frequent menstruation, with pale flow during the long intervals, in pale, weak women with general relaxation and debility. Lessens tendency to habitual abortion, improves ovarian action and overcomes sterility. Before labor it is useful for the women who seem too weak to bear children, improving all the reproductive functions; relieves nausea, vomiting, vertigo and fainting. It does not influence labor. After labor it aids iron in relieving debility and anemia, inciting activity of digestion and assimilation. It strengthens the uterus and its supports, prevents subinvolution and restores the blood. (Aletrin is a tonic for the intermenstrual periods, in pale and relaxed, debilitated women whose vitality is insufficient for the demands upon it. Each of these remedies has a specific fitness for certain cases and conditions, and the common practice of jumbling the whole lot and a few more together and administering them to every woman who has any utero-ovarian ailment is absurd.)

The above is an example of the many useful articles in *Ellingwood's Therapeutist.* We should like to reproduce others, one sample, however, suffices. Get a copy and see if you cannot absorb from it some useful hints. Then get a copy of Robinson's *Therapeutic Medicine*, and note the different but also useful matter to be obtained from its pages. All roads lead to Rome; all aids we may obtain in relieving the sick are needed. Practical bedside observations will show which of these suggestions are well founded.

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Life alone avails, not the having lived. Power ceases in the instant of repose; it resides in the moment of transition from a past to a new state; in the shooting of the gulf, in the darting to an aim.

—Emerson.

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## MORE ABOUT OPSONINS

In the December, 1906, number of CLINICAL MEDICINE we gave a brief editorial review of what was known about opsonins, the substances of unknown composition discovered by Sir A. E. Wright, which have been shown to be an active agency in the production of immunity to bacterially produced diseases.

Inasmuch as the opsonic theory is undoubtedly the "sensation" of the year, and is probably the subject most discussed at medical societies, it deserves careful consideration. It is significant that at the last meeting of the American Medical Association, at Atlantic City, there were more papers read on this subject than on any other; in nearly every one of the twelve sections there was one, or more, and the interest in the discussions seemed to be intense. We can hardly pick up one of the more scientific medical journals without finding something on this topic. The last number of *The Bulletin of the Johns Hopkins Hospital*, for instance, has five long articles dealing with it.

Repeating some of the things said in our earlier editorial, it may be well to recapitulate our present knowledge on the subject:

Opsonins are substances present in the blood-serum which in some unknown way prepare the invading bacteria for the action of the phagocytes, so that the latter are able to ingest and destroy them. If the quantity of opsonin is small the individual is more susceptible to bacterial attack—less able to repel the incursion of disease; while a large quantity of the opsonins usually means an acute invasion. There is apparently a separate opsonin for every bacterially produced disease. Wright showed that it is possible to increase the quantity of opsonin and thereby increase the resistance to disease. This is done by injecting into the blood of the patient several hundred millions of dead bacteria, of the kind that have caused the specific infection. This causes, in suitable cases, first, a fall in the quantity of opsonins, then a rise. The fall is called the "negative phase," the rise the "positive phase." By repeating these injections the quantity of opsonin is gradually increased till the "positive phase" becomes predominant. By thus increasing the immunizing power we may cure as well as prevent disease.

The basis for the use of opsonic injections (or "vaccinations," as they are improperly called) is the "opsonic index." This is determined by comparing the capacity of the phagocytes of an infected individual for engulfing or ingesting the specific bacteria with that of a normal individual, or rather a number of normal individuals.

For instance, a definite quantity of white blood-cells is mixed with normal blood-serum, an emulsion of dead bacteria added and the whole placed in an incubator for a few minutes. At the end of the necessary period a microscopic examination is made of the resultant mixture and the number of germs which have been taken into the bodies of a number of the white corpuscles carefully counted. Let us suppose that the average number of germs in each cell is four. This is normal, or 1. Now a similar test is made with the serum of the patient. Supposing that only two germs are found, on an average, in each

white cell. In that case the index is 0.5. If eight are found, the index would be 2. The index is used as a guide to opsonic vaccination, and throws valuable light upon the diagnosis and prognosis.

American investigators generally have not found the determination of the opsonic index so simple a thing as it seems to be to Wright and his pupils. Park of the New York Health Department found great diversity of results in his own work, as reported at the A. M. A. meeting, and tests made with different specimens of the same sera, made for him at the same time, under similar conditions, in other American laboratories, showed similar diversity of results. The Johns Hopkins investigators have had a like experience, and their conclusion is that "none of the present methods of estimating the opsonic content of the blood seem sufficiently accurate to be of practical value."

Wright's pupils ascribe the enormous variations of different observers to faulty technic, but the fact that these observers are the ablest laboratory investigators in the country shows that the difficulties must be very great.

The opsonins are used both for diagnostic purposes and in the treatment of disease. For instance, if the opsonic index is persistently low for a certain microbe, we may assume either that the resisting power is very low for that germ, or more likely, that the patient is suffering from a localized invasion. If the opsonic index which has persistently been low suddenly becomes high, we may assume that there has occurred an acute systemic invasion. If the index varies greatly, is sometimes low and sometimes high, then the probability is that the patient is suffering from a generalized infection.

Opsonic vaccinations are useful therapeutically at the present time only in localized attacks of disease. The injection of the new tuberculin of Koch (T. R.) was really an opsonic vaccination, and whatever benefit was derived from it was due to this fact. To give an opsonic vaccination during the negative phase, especially in systemic infections, is dangerous, as this might simply overwhelm the patient and further reduce the immunizing power.

Of course, it is irrational to inject more poison with the expectation of reaction during an acute attack, as shown by great variability of the index.

The diseases in which the opsonic treatment has shown itself most valuable are staphylococcus infections, as in cases of severe acne and furunculosis; in localized gonorrhea, as gonorrheal rheumatism; localized tuberculosis, as rectal fistula, tubercular sinuses, gland tuberculosis, etc. In systemic tuberculosis it has proven of little value, though it has apparently done good in some incipient cases.

While some of the therapeutic results have been very encouraging and the line of study opened up is very interesting, opsonic therapy is not likely soon to become a popular method of treatment. The technic is altogether too difficult and uncertain. When our greatest laboratory workers report such diverse results it certainly is not a method which can safely be placed in the hands of the general practician, who is not skilled in laboratory methods. Furthermore, while there have been some good results, they are apparently not much better than those obtained by older and much more simple lines of treatment. But the study is promising and we shall watch it unfold with much interest and much hope.

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Smile, and the world smiles with you
"Knock", and you go alone;
For the cheerful grin
Will let you in
Where the kicker is never known.

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## RETAILERS AS MANUFACTURERS

A movement is evidently on foot to enhance the business of the retail pharmacist at the expense of the wholesale manufacturer. Between the two we have no choice, other than as it affects the interests of our patient. Kindly look on us, therefore, as entirely neutral in any such fight and as having neither prejudice nor prepossession for or

against either. But as the interests of the patient may be concerned, we may have something to say on this subject from time to time.

We are now speaking of the fine exhibit of chemicals and galenic preparations shown at the Atlantic City meeting by the Philadelphia Branch of the American Pharmaceutical Association. The idea seemed to be that the retail pharmacist need not apply for his goods to the large manufacturer but should himself prepare effervescent salines, wines of coca, glycerin tonics, syrups of hypophosphites, hydriodic acid, acetanilid and bromide mixtures, antiseptics, clay poultices, and the numerous combinations so popular with a certain portion of the medical profession.

With many of these we have little concern. We use and advocate largely single remedies for single indications, the combinations to be made at the bedside as indicated. This renders the older compounds inapplicable in most cases, and we leave them to those who like them. But we did use to employ them, and some instances occur to our memory wherein our experience was such as to make us fear that the proposed plan will be found objectionable.

Once we prescribed a good deal of Horsford's acid phosphate, in the days before its owners began to advertise it to the laity and we had not as yet commenced the use of plain phosphoric acid. Actuated by an impulse similar to that of the Philadelphia branch of the A. Ph. A., we prescribed a preparation of a formula as closely as possible similar to the original. The pharmacist put it up very nicely, but he charged a dollar and a half for a bottle the size of an original selling for fifty cents.

There came to us once a sample of a new emulsion of codliver oil; made with pancreatic extract, lactophosphate of lime, sweetened with glycerin, and emulsified with Irish moss —no gum or sugar at all. It was very nice, and we prescribed a pint, to be made after the formula printed on the label. The druggist filled the order satisfactorily here also; however, he charged four dollars for the same quantity the manufacturer sold for a dollar.

In both instances the retail man succeeded in putting up as good an article as that furnished by the large manufacturer—but no better; and at an enormous advance in cost to the patient. Why should we saddle such an increase on the patient's expenses without any increase of utility? Just to enable the retailer to make bigger profits? That doesn't impress us as an object.

Whether *any* pharmacist can and will prepare an article of equal excellence, *uniformly*, as the large manufacturer, at no higher price, is a matter for discussion. If he does, all things else being equal, we shall gladly give our neighbor the preference over the distant firm. If not, he can scarcely expect us to change our customs without any apparent reason.

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There are some characters who carry their wealth with them, who are rich without money. They do not need palatial homes or a large bank account. They do not need to buy admission to society,—everybody loves them. They are welcome everywhere because they have that which money cannot buy—a genial, helpful, sunny, cheerful disposition.

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## BILIARY DISORDERS

Charles Gilbert Davis in *The Therapeutic Gazette* reports on the treatment of catarrhal cholangitis and cholelithiasis with pills similar in composition to Bauermeister's probilin, consisting, as they do, of salicylic acid, phenolpthalein, menthol and sodium oleate [i. e., soap].

The use of salicylic acid in pathologic conditions of the liver Doctor Davis began some twenty-five years ago, and he has found it particularly satisfactory in combination with the other drugs named as a cholagog and an antiseptic whose effect is prolonged throughout the entire alimentary tract. Many cases which are ordinarily considered amenable only to surgical interference can be satisfactorily treated with these pills, and he believes that under their use cholangitis, with and without calculi, will ultimately cease to be a surgical condition.

He relates six typical cases in which he found the combination effective, not as a purgative pill, but more especially as a cholagog, a concretion-solvent and a biliary

disinfectant. The menthol and the phenolphthalein produce and regulate intestinal activity, and the salicylic acid and the sodium oleate have a decided antiseptic and powerful cholagog action.

As to diet, Doctor Davis does not restrict the same too closely, but he interdicts all foods known to be difficult of digestion, and all alcoholic beverages. The principal point to be observed is to insist that large drafts of hot water be taken with the pills, for the purpose of diluting the excretions and assisting in breaking up any concretions present.

The principal point to be noted in this report is that Doctor Davis found the treatment successful in relieving the patients. His explanation of the *rationale* of his therapy we believe to be incorrect. It is unfortunate that he has considered it essential to bring back the ancient idea, that the object of treatment is the solution or removal of the calculi. This we look upon as a radical error. The gallstones in themselves do no harm, any more than a bullet encysted in the tissues. It is only when the calculus is disturbed, and the irritated biliary tissues attempt to extrude the same through inflamed tubes, that its presence is evidenced.

The disease we have to contend with is infection of the biliary passages by microorganisms ascending from the duodenum. This infection is the malady against which our therapy should be directed. We are to keep the alimentary canal clear of obstructing fecal masses, to prevent them remaining there an abnormal length of time to decompose and allow the development of virulence in the microorganisms present; and we are to destroy and get rid of as many of these as possible, or render them innocuous, perhaps. Then we are to subdue the inflammation of the bile-tubes, and for this purpose the remedies mentioned by Doctor Davis are of value; although personally we prefer others with which we have had more experience, and that of so favorable a nature as to make us disinclined to experiment further. We refer particularly to sodium succinate and boldine.

If we admit that the prime object of treatment is the removal of the gallstone, we must assent to the dictum of the surgeon that the treatment of this malady is exclusively surgical—even knowing that the removal of the calculus is by no means the end of the matter in many instances, but that a long train of sequences may still follow. But this is precisely what we do not admit. The recognition of this fact places us at an advantage in the discussion, that we trust men like Doctor Davis will soon perceive.

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We must have a weak spot or two in a character before we can love it much.

—Oliver Wendell Holmes.

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## LOBELIN IN ANESTHESIA

Professor W. Lee Secor suggests that the hyoscine-morphine anesthetic might be improved in some cases by the addition of lobelin. He refers especially to cases presenting abnormal vasomotor tension. In these he has found that lobelin works wonderfully well in affording the desirable relaxation. He suggests further that if this be given in granules at frequent intervals before the operation, not giving enough to cause nausea, it will produce muscular relaxation.

The suggestion is a good one, and it exemplifies what we have so persistently urged upon the profession, namely, the desirability of employing single remedies and combining them to meet the indications presenting in each particular case. In many instances muscular relaxation is not desirable. In fact, some observers have pointed out that in amputation, for instance, the *absence* of muscular relaxation is an important feature in favor of hypodermic anesthesia as compared with that induced by chloroform or ether. In the latter the muscular relaxation compels the surgeon to make allowance in forming his flaps, or the retraction following may cause the wound to gape or even uncover the bone. There being no relaxation with the hyoscine-morphine combination the surgeon can form his flaps exactly as he desires, without having to make allowance for a degree of retraction which may be more or less marked.

In some instances vascular tension is excessive, and it is desirable that this should be relaxed; while in other cases the muscular contractility is undesirable. In such cases Professor Secor's suggestion is important and may well be heeded. If it is desirable that the relaxant should be administered hypodermically, gelseminine might be employed instead of lobelin, which, not being a pure active principle, but a concentration, or purified extract, is not so well suited for subcutaneous administration. If lobelin be employed by the mouth, however, we would suggest that it be administered in solution, since this remedy sometimes shows remarkable resistance to the solvent action of the digestive fluids. A properly designed hypodermic case should contain not only the anesthetic tablets, but each of the three ingredients of which they are formed, separately, and such other agents as may be occasionally demanded, such as gelseminine, strychnine, sparteine and glonoin.

## THE INTERNAL SECRETIONS

In another portion of this journal we are reprinting an address given by Professor Krehl of Strasburg, which deals with some of the chemical problems of the human organism, and particularly with present-day knowledge of the functions of the so-called ductless glands. This work is particularly germane at the present time on account of the near appearance of the second volume of Sajou's book on the "Internal Secretions," to which reference was made in the last number of CLINICAL MEDICINE. We have from time to time, during the last year or more, referred to this work of Sajous, because we have thought and still think it of the utmost importance, and because we are hopeful that it may realize at least in part the anticipation of the author—that it will revolutionize our therapy. For this reason we propose to study the whole subject more at length in future numbers of our journal.

As an introduction to this study a very brief and simple outline of Sajous' theory concerning the internal secretions is here given.

Professor Sajous some years ago was struck with the defects in our knowledge of physiological problems, and as a corollary thereto the weakness of our methods of treating disease. He took up the problem, and as a result of careful study, embodied in the first volume of his book, arrived at the following conclusions:

The "missing link" in physiology is our lack of knowledge of the ductless glands and the functions of their secretions. Occupying the central and most important position is what he calls the "adrenal system." This consists of the *adrenal glands*, the *anterior pituitary body* and the *thyroid gland*. These three glands are closely related and interdependent. They are of the utmost importance in the vital processes, and they are also principally concerned in efforts directed to the *treatment* of disease.

The *adrenals* produce an oxygen-carrying substance, which Sajous calls "adrenoxin," which through the blood and plasma channels penetrates to all the tissues and structures of the body, including even the axis-cylinders of the nerves and the dendrites of the neurons. Upon this oxidizing substance the vital processes largely depend; its presence is necessary to health and function; its deficiency spells disease. It combines with the myosinogen in the muscles to produce muscular force; in combination with the fibrinogen in the blood it causes variations in temperature; with the myelin of the nerves it releases nervous energy. This substance, as will be seen, is probably the most important in the body.

The *anterior pituitary* is directly connected with the adrenals through the nervous system, controlling thereby their activity. The pituitary, according to Sajous, is the most important organ in the body—the "governing center." "Vitality" and "vital resistance" depend directly upon its functional activity.

The *thyroid*, through its iodine-containing secretion, sustains the action of

the pituitary. All poisons, toxins, drugs, act upon the anterior pituitary in the same way that the secretion of the thyroid does, either by stimulating or depressing it.

Thus it will be seen that the secretion of "adrenoxin"—the adrenal secretion—depends upon the activity of this whole trinity of glands. The substance itself is not only essential to the proper performance of the oxidizing processes of the body—the whole gamut of metabolism—but it is the natural antidote to the poisons of disease. The treatment of disease therefore resolves itself into the use of the agencies which will best affect the adrenal system through the pituitary in a given case.

Of course it is not intended to assert that the adrenal system is all there is to be considered in the problems of metabolism, though it is believed by Sajous to lie at the heart of the problem. For instance, he thinks that the *posterior pituitary body* is the chief governing center of the entire nervous system, standing second in importance only to the anterior pituitary. Of great importance is the secretion of the spleen and pancreas, the trypsin, a portion of which passes into the blood and exercises an important part in the production of immunity. Its purpose is to destroy or digest toxic albuminoids, and with the oxidizing substance it fits admirably into the side-chain theory of Ehrlich, or Metchnikoff's doctrine of phagocytosis.

While the opsonic theory has come into being since the publication of the first volume of Sajous' book, it too seems perfectly compatible with the conception that "opsonin" is only another name for the trypsin which in the blood-serum serves to digest the bacterial envelops and prepare them for ingestion by the phagocytes. As Sajous apparently shows, this conception is not incompatible with the fact of specificity, which seems to be demonstrated concerning opsonins. The relation of the trypsin to the central adrenal system will be reserved for later discussion.

This is but a beginning—but it is the groundwork of the Sajous theory. It deserves study. Just how much there is to it that will survive we cannot tell; but we know of no hypothesis which promises so much to *practical* medicine—to the treatment of disease. And that is why we propose to give it greater prominence than we have to most theories, hoping that the "family" will dig it out—dissect it—to find out what is good, and put this "good" into practice.

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Let God's work be done for its own sake—the work he has created us to do because it can not be done except by living men and women.—Bernard Shaw.

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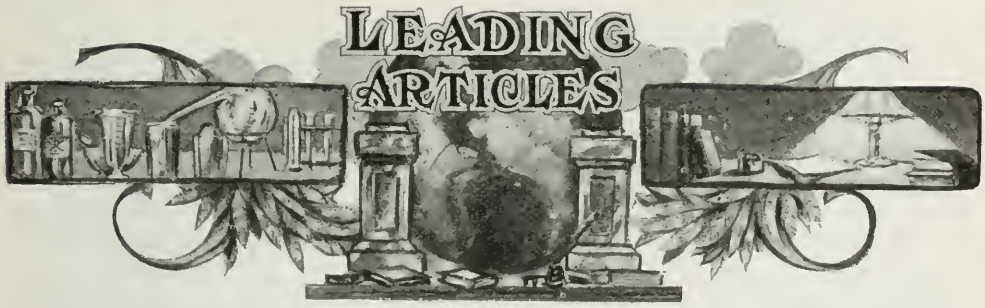
## LOOK OUT FOR HOSTILE LEGISLATION

We wish to warn our readers that there is a movement on foot to secure the passage of laws in the various states to limit or forbid dispensing by physicians. Attention has already been called to the editorials upon this subject which have appeared in *The Western Druggist*, the leading western drug journal. The last number of *N. A. R. D. Notes*, the official organ of the National Association of Retail Druggists, also favors such legislation, printing with apparent approval a portion of the address of Mr. T. C. Loehr, chairman of the Trade Interests committee of the Illinois State Pharmaceutical Association, delivered at the last meeting of this body. Of course this would be class legislation of the brashest character, the motive being perfectly plain—to swell the volume and profits of the retail drug business through legislative aid.

Physicians, everywhere, should keep their eyes open. There is little danger of the passage of such laws if the medical men are *awake*. But our profession has always been notoriously negligent concerning its own interests. It behooves us to watch this movement with the utmost care. We reiterate what we have so often said, that whether the doctor dispenses or prescribes is an individual question, which every man must determine for himself, the interests of the patient being paramount, his own interests being of next importance. *He must be absolutely free* to make his own choice. Upon that we insist. Again we say, "Watch out!"




# VASOMOTOR CONDITIONS: AUTOTOXEMIA

The importance of an understanding of the vasomotor factor in disease, and the influence upon it of intestinal autointoxication, with special reference to the summer diseases

By WALLACE C. ABBOTT, M. D., Chicago, Illinois

IN November, 1906, I published, in *The Medical Record*, a paper in which I endeavored to demonstrate the exceeding importance of a clear understanding of the vasomotors and the absolute necessity of utilization of their functions to get best therapeutic results. In this paper I spoke of the delicate adjustment of the vasomotor-governing apparatus. The first evidence of approaching disease, from whatever cause, is almost always denoted by an alteration in the caliber of the vessels in some part of the circulation. Either these vessels are contracted, forcing the blood out into the remainder of the circulation, or they are relaxed, permitting an abnormally large amount of blood to enter them.

### *We Must Study the Living*

In judging these aberrations from normal circulatory conditions we receive little aid from the study of pathologic anatomy. Our observations must be made upon the living body, as the lesions to which we refer disappear with death. It is by no means difficult, however, for the physician who has accustomed himself to study these conditions to detect the earliest alterations in local circulation, and, to a certain extent, to apply effective remedies thereto. The demand for such finely differentiated remedies, however, has not been sufficiently pressing in all cases, and so they have not as yet been evolved.

Difficulty is sure to arise in regard to the diagnosis. The physician may be perfectly conscious that he is dealing with the first stages of some local inflammation, which would assuredly develop were it not for his active intervention, but he finds it easier to recognize the morbid condition and to cure *it*, than to classify it under any nosologic designation.

We must learn to watch the beginnings of disease. Many an attack may be dissipated and, we believe, many an infection jugulated by attacking it effectively before gross anatomic lesions have developed—while it is yet a mere disequilibrium. This is treatment of a symptom, which is strictly scientific, even though it is aimed at a result rather than at the known cause of the disease. Nevertheless, this objection is academic: the treatment which removes the results may be assumed to remove thereby the cause, if the effect of such treatment is permanent. We are all likely to become so impressed by a new truth, forcibly driven into our consciousness, that we make a fetish of it; and this is true about the axiom that we must treat

the cause of disease. A dagger driven into the body is certainly a material cause of the wound, but removal of the dagger does not cure the wound. It helps, but there is yet to be accomplished repair. We constantly fail to distinguish between original causes and results.

### *The Great Vasomotor Remedies*

The universal presence of vasomotor disorder has compelled the student of precise therapeutic agents to have recourse constantly in his practice to the four great vasomotor remedies: aconitine, digitalin, veratrine, and strychnine. The combination of the first and second is based upon the principle first formulated by Burggraeve, that apparently antagonistic remedies may work in harmony, each acting where its action is requisite to restore physiologic equilibrium.

Let us take, for example, any local inflammation: It begins with hyperemia, the presence of an excess of blood in the part indicating that the walls of the vessels there are deficient in tonicity, allowing the blood to press in in abnormal amount. Nevertheless, the quantity of blood in the entire body remains the same, and if there is too much in one part, there must be too little in some other part. And this means that the vessels of that part are contracting or that their tonicity is excessive as related to the pressure of the blood within these vessels. Under these conditions the dilated vessels will be acted upon and contracted by digitalin, while the contracted vessels will be relaxed by aconitine, each set of cells affected absorbing from the blood that which they need to restore them to that state of equilibrium which we term health.

If the heart is feeble and vitality low, we add to the basic couple strychnine arsenate. Strychnine strengthens the heart and incites every vital function. Arsenic induces fatty degeneration, and according to the rule that abnormal tissues and substances, the product of disease, are more fragile and readily broken down than are normal cells and tissues, we have in arsenic an effective agent in dissipating beginning morbid deposits, by inducing their degeneration and absorption. If, however, the heart is excited and elimination is not sufficient, we add veratrine, the most powerful known agent to combat this condition, and the greatest eliminant we possess.

As the conditions requiring these remedies constantly recur in the vast majority of all cases the general practician is called upon to treat, we find constantly in his hands the two vasomotor triad combinations, aconitine, digitalin and strychnine arsenate, suggested by Burggraeve and known as the "dosimetric trinity;" and aconitine, digitalin and veratrine, added by myself and known as the "defervescent compound." The skilful application of these two combinations renders the physician the master of very many of his cases.

### *The Influence of Intestinal Toxemia*

There is another condition which is, if possible, more frequently met even than the vasomotor perturbations I have just discussed. In fact, clinical studies force upon one the conviction that, as a cause of disease, there is nothing so general and so far-reaching in its effects. I refer to the absorption into the blood of toxic matter from the alimentary canal. This toxic matter is to some extent derived from the food directly, but more frequently it is due to arrest of the feces in some portion of the lower bowel and its retention there until decomposition has developed toxic principles, which are absorbed into the blood. Circulating to every cell of the human body, the deleterious influence of these toxins is especially manifest at the points of lowest vital resistance, and here evidences of local disease will make their appearance. Naturally, the delicate nervous structures most frequently exhibit evidences of intoxication; and I firmly believe it will yet be shown that the chronic affections of the nervous structures are almost entirely due to the operation of this cause.

More recently Dr. Janeway has called attention to the vasomotor factor in the

so-called heart-failure occurring with pneumonia. Here we have extreme prostration, the skin white and cold, the pulse rapid and the heart-beats ineffectual. But there is neither venous stasis, edema, nor cyanosis. Following Romberg and Passler, he attributes the failure to the vasomotors and not the heart. In fact, the real cause of death is vasomotor relaxation, the patients bleeding to death into their own veins, or rather capillaries.

*Too Little Attention Paid to the Capillaries*

This leads us to remark that in studying the vasomotor conditions too little attention has been given to the capillaries and to the various other parts of the circulatory system. Remedies, such as ergotin, act as hemostatics by causing contraction of the unstriped muscular fibers in the coats of the arteries. These fibers are wanting in the lesser or pulmonic circulation and the cerebral vessels; so that in neither of these areas can spanemia be induced by the administration of arterial constrictors like ergotin. In fact, these remedies cause the vessels of the tracts named to be engorged with blood, and we can only reduce pressure in these two areas by relaxing the arteries in the general aortic system.

The area of the entire capillary system is computed to be seven hundred times that of the aorta. A very slight capillary relaxation will therefore suffice to drain the aortic system of blood. But how can we talk of relaxation or contraction of the capillaries when, according to present conceptions, there are no capi lary vessels—what have been termed such being merely intercellular spaces through which the blood traverses in going from the terminal arterioles to the beginning venules? If we admit this we must lay aside the hypothesis of a special system of nerves, vasoconstrictor and vasorelaxant, governing the capillaries. It is obvious, however, that this pertains rather to the technical explanation of observed phenomena than to the phenomena themselves. If we administer a remedy that increases the elastic force of the walls of the cells surrounding the space we call a capillary, this space will be enlarged, and more blood will enter it by capillary attraction. The phenomenon of hyperemia is therefore a spasmodic contraction of the cellular elements rather than a paretic condition of the vessel-walls. And in its final analysis the remedies causing such a condition are stimulant rather than paralyzant.

*The Importance of the Capillary Factor*

The point we wish to make, however, is the enormous importance of even an exceedingly slight increase or decrease in the capacity of the capillaries to admit blood, an appreciation of the importance of which, with real control, making for best success in treatment.

All things else being equal, vasomotor equilibrium means health, while vasomotor disequilibrium, almost invariably associated with autotoxemia, means disease—functional at first, as in most acute affections, and later organic, as in chronic conditions, such as rheumatism, socalled kidney affections, cardiac troubles, most cases of tuberculosis, etc. And it is the ability to detect and correct these wrongs in their incipiency that marks the successful physician of this day, his success being exactly in proportion to his ability and the positiveness of his application thereof. In this great secret of the abortion of acute affections, thus forestalling the chronic—but that is "another story."

*Vasomotor Therapy and Summer Diseases*

In no class of diseases are these facts more clearly illustrated than in those of the summer season—the diarrheas, dysenteries, indigestions, which are so common and owe their inception apparently to such slight causes. Especially is this true of young children, who are particularly susceptible to changes of temperature. Thus, on the one hand, a slight chilling of the skin will so derange the distribution of blood that serious derangement of the digestive apparatus follows, due to sudden congestion of the splanchnic area; on the other hand, during the heated season,

when the blood is being rapidly carried to the skin to maintain equilibrium of body-heat through evaporation, the ingestion of food a little more heavy or a little less digestible than common may in turn upset the digestive apparatus. In either case the chemistry of the intestinal canal is interfered with, and the result is the production within the bowel of a stinking, poisonous, fecal mass, whose absorption further adds to the systemic disturbance and through its action upon the vasomotor centers already described creates a vicious circle—disease.

In these summer diseases, therefore, it is apparent that we must keep these *two* factors well in mind: the vasomotor factor and the autotoxemic one, arising from within the bowel. In response to the first, such prophylactic measures as suitable clothing to meet temperature conditions (especially in children), frequent bathing, and a not too hearty diet—stuffing, in fact—will of course suggest themselves. At the first inception of trouble the bowel should be cleaned out with small doses of calomel and saline, rendered aseptic with the sulphocarbolates, and put as nearly at rest as possible. Meanwhile, the vasomotor condition should have immediate attention. With coolness and pallor of the skin hyoscyamine or atropine, in small doses, will of course be indicated. Whatever their action on the capillaries, they bring the blood to the surface. With febrile conditions the judicious use of the "trinity" or the "defervescent" combination will serve to bring back the balance and, often, rapidly restore to health.

Without entering into detail, these are the principles to be observed in all cases of this class—principles which are wide-reaching and of the utmost importance in practically all classes of disease.

# WHAT SHALL THE DOCTOR DISPENSE?

Some of the things which every doctor should carry with him to the sickroom, and classes of remedies which should generally be dispensed rather than prescribed; with advantages of personal administration

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THE doctor who enters the chamber of suffering at the hour of midnight, armed only with a pencil and a piece of paper, is as unwise as the soldier who rushes to repel the midnight attack of the enemy, leaving his arms and ammunition in his tent.

Much valuable time as well as prestige often is lost, in urgent cases, by not having some few picked remedies at hand. For the relief of pain, the emptying of the stomach and bowels, the checking of hemorrhage, and for heart affections, one should always be prepared. A hypodermic syringe (a good one, which will not get out of order) and a few tubes of tablets should, like the doctor's nerve, always be with him, even in his dress-suit. One tube should be morphine with atropine, one apomorphine, one strychnine, and one nitroglycerin. A tube of morphine alone might be added, as atropine sometimes, though not often, is objectionable. A combination of strychnine, nitroglycerin and digitalin may be added.

### *Remedies which Should be Dispensed*

For obstetric practice a sealed tube of aseptic ergot as well as one of morphine, hyoscine and cactin will be found indispensable. We have long been in need of a medicine which, used hypodermically, will cause a prompt evacuation of the bowels. This we seem to have in apocodeine hydrochloride.

In confidential cases patients should receive their medicine direct from the physician. Emmenagogs are sometimes proper-

ly advisable, yet what drugclerk and his numerous young men-friends will not surmise the worst, both regarding the patient and the physician, when a lady hands in a prescription for these remedies? Gonorrhea and syphilis should be treated by the doctor, in many cases, without the aid of the druggist. The druggist treats numbers of such patients without the aid of the doctor. Such cases should be kept secret, and a drugstore is not a secret-service bureau. Besides this, there is the danger of the patient repeating his prescription indefinitely, to the injury both of himself and his physician. The general practician should keep on hand bichloride of mercury, protoiodide of mercury and the various combinations used for injections and the internal treatment of gonorrhea and its sequellæ.

*Habit-forming Drugs and those for Every-Day Use*

Narcotics, habit-producing drugs, were much better dispensed than prescribed, as they would be under the control of the practician. He would know how often the patient was repeating the medicine and, according to his judgment, allow or restrict its continued use. Druggists generally pay little attention to a *non repetatur*, and some patients are remarkably susceptible to the seductive influences of drugs.

Pecuniarily there are remedies which should be kept on hand, as, for instance, those .drugs and combinations which are in every-day use and which keep well, as the various pills for constipation, the tonics, the coal-tar preparations, throat lozenges, and so on.

The idea that remedies kept in the office of the physician must be pills, tablets or ready-made mixtures is only partially true. While these are the most convenient for the practician to handle, yet many combinations may readily be made by the physician with a few active principles, tinctures and fluid extracts on hand.

A drug administered at once by the hand of the physician to a patient in dire distress is certainly more satisfactory to both the physician and patient than a prescription written on a piece of paper. In a few minutes both physician and paper are gone and the time of their return is in doubt. In the former case the physician may have time to wait and note the action of the medicine given, and this has a good psychical effect, at least on the patient.

Physicians practising in proximity to reputable pharmacists are under consideration. The country doctor, who has no reputable pharmacist near, must necessarily keep a full line of drugs.

The general practician should keep on hand remedies for the relief of severe pain, emptying the stomach and bowels quickly, antidotes to carbolic acid and a few of the more frequently used poisons; heart stimulants, aromatic spirit of ammonia, strychnine, nitroglycerin, amyl nitrite, and alcohol, if to hand, are at times, and under urgent circumstances, worth their weight in gold.

The general practician should neither dispense nor prescribe exclusively, but adhere to the happy medium, doing part of each, as best for both patient and himself.

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We like the spirit of this article, and particularly that of the last paragraph. The dominant thought in the mind of the physician should be the welfare of his patient. We believe that, for reasons given by Dr. McKee, this motive will, if followed, lead to more general dispensing by physicians; but we believe just as firmly that in cases where the doctor thinks it possible to serve the patient better by prescribing he should do this. Place the patient first—next your own interest.—Ed.

# TREATING DISEASE—AND "AUTHORITIES"

This article, which is reprinted from The Medical Record of June 22, 1907, is a plea for a closer study of that practical side of the healing art—treatment

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MASTERY of all the sciences upon which medicine is founded does not make the physician. He would be helpless without them, but he is worse than helpless with them until he learns how to use them, how to construct out of them the special art which enables him to cure disease." So said Draper, and never was there a truer utterance. Yet there are men in the profession—men who like to be looked upon as authorities in medicine—who belittle therapeutics and oppose nearly every therapeutic suggestion not offered by a member of the "Four Hundred."

### *Little Progress in Therapeutics*

I believe, however, that the great majority of practising physicians heartily endorse the words of the late J. Milner Fothergill, M. D., M. R. C. P., who said in the very first paragraph of "The Practitioner's Handbook of Treatment:" "The ultimate aim of all medical research is the treatment and prevention of disease. It is eminently desirable that a medical man should be generally well informed; but what is to be still more devoutly wished for is that he should be a skilful practitioner. It is quite possible to be the one without being the other. The combination is what we hope to see accomplished. The tendency of modern medical teaching has been rather to produce the first, leaving the second quality to develop itself, or to remain in a condition of imperfect evolution. We constantly hear it asserted that the highly educated medical men of the present generation are not more successful in practice than their less accomplished but more practical predecessors. Even members of the profession are to be found who assert that the man under whose treatment they would place themselves, if seriously ill, is the old-fashioned general practitioner. This is a serious reproach to our recent advances in scientific medicine; to our modern instruments of precision in diagnosis; and even to our progress in rational therapeutics, in late years."

With the marvelous progress in diagnosis, and under the influence of the German school we have come to attach, not perhaps an exaggerated importance to diagnosis, but an importance which has resulted in placing therapeutics in a very subordinate position. It is all very well for a patient to feel that his medical man is a skilful diagnostician, but the essential thing after all is confidence in his power to aid him when stricken and prostrated by disease or accident. It will occur to the minds of most men that the physician's principal duties are to prevent and cure disease. "The real physician," said Broussais, "is the one who cures; the observation which does not teach the art of healing is not that of the physician, but of the naturalist."

### *The Physician Should do More Than Classify Disease*

We should do more than classify diseases, as a botanist might sort and classify plants and attach to them their proper names. We are dealing with human beings, not some dried specimens which we label and place in their proper places in a herbarium, although I sometimes think there are many ultra-scientific physicians who would prefer to confirm their diagnosis by an autopsy, and preserve some of the pathological specimens than to assist the patient to recover when the diagnosis is in doubt.

I remember a story told by "Uncle" Allen, formerly president of Rush Medical College. He was being shown through a large pathological laboratory in Paris, and was wearily looking at shelf after shelf loaded with pickled specimens of organs and tissues from people long since dead. At last he turned to the great pathologist and said "Great God! Where are the people you have cured?"

To prevent and cure disease is the physician's actual business in life; and it is here that success is most to be desired. Our success is measured by our ability in this direction, for the public cannot be expected to estimate us by any other measure than that of our usefulness. Even Dr. Osler, who is not much of a believer in therapeutics, says: "There is no one measure which can compare with the decrease of physical suffering in man, woman, and child when stricken by disease or accident. This is the one fact of supreme personal import to every one of us. This is the Promethean gift of the century to man."

We should not look upon each patient who calls upon us for aid as a "case" of this or that "disease," of interest only as a victim of some morbid process furnishing us an opportunity to demonstrate our diagnostic skill, but as a suffering human being possessing the attributes of humanity collectively, together with some variations which form individual peculiarities, and who should be relieved if in our power to relieve him. Shall we be so "scientific" that we shall refuse to treat symptoms because we may be unable to name the "disease," or because, for instance, the patient is suffering from pneumonia, or some other acute, self-limiting disease, so called?

### *Rarely Possible to Remove Causes*

It is rarely possible to destroy the cause of disease. In the majority of diseases, perhaps, it is impossible to overcome or remove the cause, but we can counterbalance many of the primary effects. For example, since we are unable to dissolve a urinary calculus, we must endeavor to annul the spasm and the pain which are due to the presence of the calculus, and by proper diet and therapy do something, not against the calculus itself, but against the causes which have made it grow. Although we cannot make new heart valves out of imperfect ones, nor rarely restore a degenerated heart muscle, we can by proper treatment relieve the symptoms resulting from failing compensation.

We often see certain symptoms accompanied by certain others, and we observe, in general, a constant succession in certain groups of symptoms. Disease is nothing but a new manner of being of the organs, which present either new phenomena or different modalities of normal ones. Herein lies the difference between clinical medicine and pathology: the latter shows us the species and genera of disease; the former compels us to bear in mind that it is not a disease but diseased persons with whom we have to deal.

The morbid phenomena determined by numerous and different conditions vary unceasingly, according to the varying combinations of these conditions; it is, therefore, impossible to refer diseased conditions to certain types which shall be invariable and uniform. If all individuals had organs constituted in the same manner, and were endowed with the same dynamic energy, if climatic conditions were the same for all, and all could be subjected to the same physicopsychical life, the same perturbation would then produce the same effects in all, in the same invariable order of succession. In such a case there would be as many diseases as there are varieties of initial perturbations, and they could be classified as one classifies chemical reactions.

### *Enormous Number of Diseases*

Indeed, no less an "authority" than a committee of the Royal College of Physicians, London, has arbitrarily given us a grand total of one thousand one hundred and forty-six (I wonder they didn't make it an even fifty) variations from health as making up the conditions and the phenomena of disease to which the human family, at this period of its civilization, may be subjected. And to these "diseases" have been given

grotesque and fantastic names, as if they were entities, or individuals. Indeed, we rather look upon them as personalties. "Pneumonia attacked him." "He had an attack" of this or that. It is like a "foot-pad" "attacking" one. A classification of diseases of some sort, however, has an advantage; it is, that the presence of certain symptoms and signs leads us to anticipate certain others, and that their order of succession reveals to us the existence of latent perturbations as well as the nature of the causes which have aroused them.

Disease is made up of morbid symptoms and effects. But the relation of causality and dependence which unites these elements often requires that a system of treatment should take cognizance principally of symptoms, not so much on account of the value of the symptom in itself, as on account of the symptoms which depend upon it, and the morbid effects which it may produce.

Every symptom represents a constituent element of disease, but all symptoms have not the same hierarchical value, and do not all deserve to be placed in the class of morbid elements. In annulling a symptom one does not confine himself to destroying its effects and simplifying the morbid conditions, for by this means many others can be avoided, which would naturally and physiologically follow from the existence of the one which was to be supressed. Symptomatic therapeutics, therefore, is in my opinion, not only curative of a portion of the disease, but preventive, besides, of ulterior morbid phenomena, complications and aggravations.

### *Treating the Causes of Disease*

If we are called to treat a sick person, our first thought should be to discover the cause of the disease. That cause, when discovered, will be either still in existence or will have passed away. If it still exists, we must do our best to destroy it, to neutralize it, or to prevent its results. If the original cause has disappeared or if it is not amenable to treatment, we may operate upon it, but we can and should direct our efforts upon its results. These results may be primary, secondary, tertiary, etc., and it will be our duty to fight them, choosing for particular attention those which are the most grave, the most perturbant and the most insupportable.

By drugs alone we can restore some of the normal constituents of the blood when they are defective; we can remove abnormal substances present in the blood, and if we have reason to suppose that the products of imperfect metabolism are present we can greatly facilitate their excretion by the kidneys and bowels. We can antagonize and destroy the effects of certain toxic matters which cause disease. We can mitigate or limit both external and internal inflammations. We can act, for example, on the inflamed mucous membrane of the bladder by sedatives or stimulating germicidal substances; we can also influence the lining membrane of the tubes of an inflamed kidney. We can increase secretion in the neighborhood of an inflamed part, and can alter the general tension of the vascular system. The local vascular condition can be modified by dilating vessels in adjacent parts, and we can exercise a sedative influence on the mechanical conditions affecting an inflamed part. It is thus that morphine is used in peritonitis.

### *How Some Remedies Act*

The products of ordinary inflammation which interfere with the functions of tissues may, when consisting of cell-growths, be broken up and absorbed under the influence of mercury and potassium iodide, as the products of syphilitic inflammation certainly are. There is reason to believe also that we can cause the absorption of inflammatory deposits by stimulating the nerve endings in adjacent areas. Arsenic can be shown to have a very decided effect on the nutrition of the skin, and it often distinctly influences inflammatory deposits therein.

Drugs such as chloral, atropine, physostigmine and strychnine act on the tissues of certain parts of the brain and spinal cord, and thereby increase or decrease the functions of those parts. We can depress the functions of the motor-nerve endings with coniine, and the sensory nerve endings with

aconitine. We can paralyze the involuntary muscle fibers directly with the nitrites or indirectly with chloral hydrate, drugs which depress the functions of the vasomotor center. In valvular affections of the heart we cannot remove the chief pathological condition, but by acting on the cardiac muscle and its ganglia we can so strengthen and moderate the beat as practically to restore its normal function. We can stimulate or depress the tissues of the various glands. We can improve the nutrition, and therefore the function of almost all the tissues. I might go on for almost an indefinite period telling what can be done in the treatment of disease. In short, we can do as much with our medical cases as surgeons can do with surgical cases. Yet surgeons, as a rule, and many so-called authorities among medical men belittle therapeutics.

### *Separation of the Two Branches of the Profession*

With the evolution of medicine from fetishism, medicine developed into lay and clerical practice; the ecclesiastic being forbidden to shed blood, naturally tended to internal medication, while surgery became the province of the layman. This separation of the branches of the profession led to the surgeons being affiliated with the barbers, while the internal-medicine men became apothecaries, and through plutocratic influences were at one time affiliated with the grocers. Through this evolution the mutual contempt of the cleric and the layman persisted. As the search for truth became the the object of the medical man, surgical and medicinal therapeutics as the end of medicine sank into the background and were overshadowed by diagnosis. Under this principle receipt-book therapy gave way to the science of internal medicine. The physician then appeared and drove commercial quackery from both surgery and pharmacy.

The gap that had been created between the two branches of the healing art is well illustrated in the chaotic titles given in England to medical men. There are members of the Colleges of Physicians and Surgeons and Licentiates of the Society of Apothecaries practising side by side with M. D's. Surgery for awhile dominated therapeutics and led to the abuses of venesection. Of necessity surgery adopts either the wild reflex theory or the equally abused gross lesion, these two being the most profitable from the monetary standpoint. It requires less diagnostic skill and less scientific acumen to discover a gross lesion or a reflex disorder than it does to find remediable derangements of physiological balance. The gross lesion and the reflex have a good deal of the mechanical principle of the nickel-in-the-slot machine. The body on this principle is not a delicately balanced mechanism, but an appendix to some of its organs, removal of which or of a gross lesion in it will create recovery.

The surgeon ignores the metabolic changes produced by an operation, irrespective of its seat. He owes his immunity from malpractice and other serious consequences because medicine has found for him antiseptics and anesthetics. This gift of medicine has been notoriously abused for the benefit of the surgeon. Perhaps no greater evidence of this can be found than the marked change which has occurred in the position of the greater surgeons toward oophorectomy and allied genital surgery performed for non-surgical reasons. From the outset Battey's operation was opposed by neurologists and internists as dangerously and brutally useless. This position is accepted by all great surgeons, although for years the evil results of oophorectomy were suppressed by "authority."

### *No "Authorities" in Medicine*

Authority in medicine, as in science, does not exist. No man in science is justified in claiming aught that will not be supported by control experiments. "Authorities" are men who have written text-books, most of which are antiquated when they appear, and most of which are published through favor. For this reason the courts will not receive any book as authority, regarding it as a mere expression of individual opinion. The scientific spirit of the day disclaims as false and misleading authority which will not submit to test and criticism of its truth.

The self-constituted authorities in medicine have opposed every advance in therapeutics, every remedy, every method. The introduction of such valuable drugs as cinchona, colchicum, mercury, and nearly all our indigenous drugs encountered violent opposition by the alleged "authorities" of the regular school. So-called physiologic therapeutics, such as electricity, massage, hydrotherapy, were first used by "irregulars" and opposed by the "authorities;" and only when they were forced to recognize their value did they "get into line." Even "suggestive therapeutics" and hypnotism, now recognized as valuable, were once denounced as unscientific and "quackish" by the "authorities." It is a strange irony of fate that resuscitates with honor a discovery once buried in disgrace. Mesmer published his theory of animal magnetism in 1775. Ten years later the French government appointed a commission composed of eminent physicians and savants ("authorities") to investigate his system; an adverse report brought irretrievable disrepute upon its author, and Mesmer returned to Germany to perish in oblivion. To-day his hypothesis is sealed in the generally admitted fact of the power of one mind over another, and in hypnotism is recognized a positive therapeutic force. Strangest of all, the very nation which laughed to scorn the early promulgator of this mysterious agency, only lately claimed its most ardent advocate—Charcot.

### *Progress in the Healing Art*

"The world moves" in medicine as in other things. The treatment by drugs becomes more simple and direct every year; in place of the old unreliable galenical preparations, the active principles used with definite intention and a distinct aim to produce a certain effect, are being generally employed by "up-to-date" practising physicians. The *raison d'etre* of the bulk of the Pharmacopeia has passed away. The active principles are now being recognized as the fixed stars in the firmament of medicine, around which a multitude of inferior lights revolve in various subordinate relations. To these remedies of unvaried and uniform strength we may trust implicitly.

Not infrequently we find that certain "professors," to say nothing of editors of medical journals and pharmacists, are men of restricted observation and not nearly so well versed in clinical experience as the average doctor who is actively engaged in bedside practice.

The time has passed when a few men can successfully set themselves up as authorities, or dictators, or arrogate to themselves any special theory or procedure. Candid practicians to-day recognize good in all systems based upon scientific thought and pursued with intelligence and sincerity. By means of release from the shibboleths of the past, and adherence to a given "authority" or "school" the freedom of present practice is greatly enhanced, to the immense benefit of the patient and the lasting honor of the physician.

I cannot too strongly deprecate any tendency to discord and contention among a body of men to whom is accorded the highest privilege decreed by the genius of science—that of alleviating human misery. Whenever the physician's range of study and practice becomes limited by prejudice, or narrowness of intellectual vision, he falls below the standard set by the canons of Christian sympathy and the dictates of steadfast devotion to the amplest interpretation of his calling.

# AUTOINTOXICATION FROM BEER AND SPIRITS

The newer knowledge concerning the action of alcohol shows that instead of aiding digestion it impairs it, and that it may be the cause of serious autointoxication. Some illustrative cases

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IN Hufeland's "Art of Prolonging Life," written in 1790, and one of the few books of that century still published and read, there is a distinct recognition of autointoxication states generated in the intestinal canal by the fermentation and changes of foods and drinks. Several of the proprietary medicines owe their success to the recognition of this condition and the application of antiseptic and eliminative measures. One such remedy, widely advertised and supported by volumes of testimonials as having cured obscure disorders and averted serious diseases, contains the sulphates of magnesium and sodium concealed by some flavoring substances. The value of this remedy is in its power to overcome these autointoxicative states which are largely unknown.

A book written by an unknown man, claimed to be the science of a new life, was nothing more than a promulgation of the theory of two meals a day, pointing out the same range of causes, with abstinence as the remedy. Eating large quantities of food three times a day is very likely to produce intestinal troubles by supplying more nutriments than can be assimilated and furnishing the conditions for poisoning from that which is not used. Every practician is familiar with autointoxication and infection from the presence of foods which undergo putrefactive changes. The good result from antiseptic and eliminative treatment demonstrates this.

### *Alcohol does not Aid Digestion*

I write this to call attention to a particular form of autointoxication, due largely to the products and chemical disturbances which follow from the use of beer and spirits. The common theory that spirits increase or in some way aid digestion and can be used with foods with comparative safety has no support in modern research. Persons who drink wine and beer only at meals are never types of health and never free from digestive disorders so common to this class. Moderate users of spirits at meals only are not common in this country, for the reason that they are unable to confine the use of spirits to the time of food-taking. Literally, such persons soon begin to drink at other times and occasions, and often to excess.

The average moderate drinking man, whether using spirits at meals or on other occasions, very soon becomes an invalid. Often this invalidism is called "rheumatism," "malaria," etc., and is marked by local palsy, headaches, irregularity of the heart's action, insomnia, dyspeptic symptoms, catarrhal difficulties, with alternate constipation and diarrhea. These and other obscure symptoms are referred to various causes and are rarely recognized as having any connection with the use of beer or spirits. The disappearance of all these symptoms, after periods of total abstinence from spirits is usually ascribed to some other cause.

### *The Autointoxication of the Beer Drinker*

The ordinary beer-drinker is the most prominent example of autointoxication. In many instances but little change is noted in the first period of addiction. One may use beer daily for a long time, without any noticeable change, but sooner or later a class of symptoms will appear which clearly point to the presence of toxic products and their absorption into the system. The fatty de-

generation so characteristic in beer-drinkers, associated with increase of flesh, loss of vigor and enfeebled action of the heart, is common in most cases. Enfeebled vigor and slow vitality are noticeable, particularly among the English workmen in large cities and towns. Such persons have every appearance of health, but when injured or attacked with disease, have no resisting power and die from apparently the most trivial causes. In this country beer-drinkers usually are dyspeptics and have catarrhal and other local inflammations. They suffer from influenza, malaria, are sluggish, exhibit mental feebleness, and are great patrons of the doctors and free dispensaries.

The use of wines and strong liquors in moderation or excess is followed by neuralgias, insomnia, and obscure pains which are called "rheumatism," and "malaria" or "sequelæ of the grip." Other symptoms of disability which are noted in persons who use spirits to excess are apparent in disorders of the nervous system. Some of the most obscure symptoms pointing to changes in the brain disappear rapidly after the discontinuance of spirits. In clinical studies this fact is so apparent that careful inquiries are always directed toward the habits of the patient to determine the influence of alcohol, if possible.

### *How Alcohol Acts on the Body*

The habitual use of alcohol by the people is becoming of greater significance clinically, and next to syphilis is a contributory cause in the production of a great variety of disease, and should be inquired into in every obscure case. Recent pathologic studies have cleared away much of the obscurity concerning the action of alcohol on the organism. We now know that alcohol, even in small quantities, has a peculiar corroding action both on cells and tissues, impairing their power of growth and repair, and diminishing their functional activity. The nutriment which would naturally be used to repair cell and tissue is diverted, changed, and becomes waste-products.

The action of alcohol on the nerves, particularly those which control the blood-vessels, lessens the power of control and permits the blood to pass with greater force and volume, putting greater strain on the walls of the minute arteries, and is probably followed in many instances by minute hemorrhages. Alcohol in the blood diminishes the oxygen-carrying property, destroying the hemoglobin, and is followed by states of starvation. The waste products are retained and become sources for the growth of pathogenic germs. Both the liver and kidneys are subjected to increased activity with diminished nutrition. The pathologic condition is clearly that of starvation and irritation which rapidly merges into inflammation and exhaustion. The products of these deranged metamorphoses become real poisons, and their presence in the system is marked by many and obscure symptoms. Often the evidence of these pathologic conditions is confirmed by the results of treatment.

### *Grave Diseases Cured by Abandoning Spirit-Drinking*

An example will make this more clear. A moderate-drinking lawyer who was an invalid, having been unsuccessfully treated by many physicians for many grave diseases, suddenly became a convert to Christian science. He abandoned the use of all spirits and lived on a restricted diet with mineral waters. The recovery which followed was attributed entirely to mind-effects. In reality it was simply the removal of the causes, viz., the spirits, overeating, and the auto-intoxication which followed.

Again, a farmer, who used cider-brandy regularly every day, was thought to have gastroenteritis, with colitis and local paralysis. Heart-lesion and asthma were also present. After various efforts to recover his health, which were unsuccessful, he gave up all use of spirits, and was treated in a sanitarium by baths and a restricted diet, including milk. The result was most satisfactory and his recovery rapid.

These are common instances which are often seen in practice. The young physician trained in the technic of modern diagnosis always finds very grave symptoms of organic disease in such cases. To the older physi-

cian with experience and an intuitive diagnostic sense the term "bilious" would express his conception of diagnosis and subsequent treatment.

A great variety of obscure symptoms, whose origin would be doubtful, should always be treated on the supposition that the poisonous products may be the results of spirits and allied causes. Inflammatory states and bacterial sources of infection, localized lesions, and irritations may all spring from the same source, and sudden recovery following the use of commonplace remedies and placebos should be considered evidence of their toxic origin. Many of the most wonderful cures ascribed to various remedies are nothing more than the removal of toxic poisons. In neurotic persons these conditions are probably often present, and the value of a hospital treatment very often is due to a change of diet and removal of certain causes which were not recognized. The action of a cathartic in all inflammatory conditions is a practical measure along the same line. Neurasthenic states of the brain and nervous system, from overwork and neglect of normal living, may strongly predispose to the formation of toxins in the intestinal tract, the absorption of which will still further complicate and add to the disorders present. Want of proper muscular exercise, confinement in bad surroundings, using food not adapted to the climate and work, are also prominent causes.

### *Insomnia Due to Self-Poisoning*

Insomnia is another common condition following poisoning. In a patient under my care, where insomnia led to morphine taking, the treatment by baths, mineral waters and restricted diet resulted in complete recovery. The original cause was toxemia. The use of beer for its supposed food- and strength-value often increases this condition. The temporary relief which follows from its anesthetic action on the nerve-centers creates the impression of cure, while in reality the poisoning is increased. Spirit-taking for the same reason is often followed by the same results. Sclerotic states of the brain and cord which follow the moderate or immoderate use of spirits, and the slight hemorrhages which we now realize to be very common, are all the direct results of the changes in metabolism and the formation of poisoned products which in themselves become sources of injury. The term "bilious," in disrepute among modern physicians and indicating some unknown congested condition, has pointed out lines of treatment the results of which have been far more satisfactory and nearer a final cure than from any modern remedies. The hydropathic theory of disease and its treatment, particularly the internal use of water, is also much nearer the most-advanced teachings of science and its practical application. I append some clinical illustrations of these facts to bring them into greater prominence. I select some extreme cases as examples of the possibilities of relief from treatment based on this theory of autointoxication.

### *Some Illustrative Examples*

A lawyer at the age of 52 gave up business, on the supposition that he had paresis and must die. A period of ten years of active treatment and consultations had confirmed the opinion that he was incurable. He continued to use spirits every day, at meals and at intervals, eating very heartily, and exercising very little. He suffered from palsy, lancinating pains, insomnia and gastro-intestinal disturbance, was intensely irritable, and depressed at times, and had delusions of exaltation, which slowly increased. By an accident he was forced to stay at a sanitarium, where he reluctantly consented to the withdrawal of spirits and the substitution of baths and moderate exercise. The change was so pronounced that the treatment was continued. Three months afterward all symptoms had subsided and he was able to go about free from pain and fully restored. He returned to his profession, working moderately and living abstemiously, using baths daily. Four years afterward he still was well and strong. The inference was clear that his paresis was very largely functional and due to the toxic conditions of the body. This case was the subject of much discussion, and has been published in the journals.

An instance of a remarkable cure ascribed to a preparation of soda was undoubtedly due to hygienic measures of baths, abstinence from spirits, and a limited diet, followed continuously for months. I pointed out this probable fact, to the disgust of the physician, who thought he had made a discovery of a new use of soda.

A second example of the same class was that of a prominent clergyman who for years had used wines at the table, and beer at intervals for its supposed tonic action. After an attack of influenza, hemiplegia and great enfeeblement followed. The urine showed disease of the kidneys and the stomach and intestinal tract also were deranged. Several very elaborate diagnoses of grave diseases were made by physicians and equally elaborate plans for treatment were suggested. He was finally put under the care of a country doctor, with no hope of recovery and only the expectation of making his last days comfortable. This physician used a cabinet-bath for profuse sweating, and massage followed by a course of dieting, with mineral waters, and passive exercise. The recovery was rapid. The paralysis disappeared. His mental conditions changed and all symptoms of inflammation vanished. The restoration was complete. He did not resume his profession but went into active outdoor service, and is now—three years afterward—well and vigorous. This case, like the other,was clearly one of poisoning which was rapidly merging into a chronic condition, but fortunately the removal of the active causes enabled nature to restore much of the lost health and vigor.

*A Case of Supposed Cerebral Hemorrhage*

An active, energetic lawyer, 55 years of age, had a convulsive attack, with unconsciousness, followed by hemiplegia and great feebleness. This was considered cerebral hemorrhage. The physician gave spirits as as a tonic and large quantities of liquid foods to keep up his strength. He had been a wine-drinker at the table, also a very hearty eater of meat, using large quantities of rich food and occasionally using spirits. For two years he suffered from headaches and intestinal troubles and prolonged periods of prostration. Albumin was found in the urine, and his case was regarded as serious. I was called to witness his signature to a will and to determine his mental condition. Acting on my advice the family physician removed all spirits and restricted the diet, giving mineral waters and baths daily. The result was very marked, with rapid recovery and a complete change. After a tour to Europe, under the care of a physician, he returned in good health and vigor, and is now—six years after —strong and well. This was a clear case of autointoxication, and the supposed hemorrhage was a poison attack from accumulation of toxins in the brain centers.

A mechanic and mill-owner,without hereditary history, who had been temperate and regular in his habits up to 46 years of age, returned from a trip to Europe with the habit of using wine at meals. For the next five years he drank sweet wines freely at the table, using large quantities of rich foods, on the supposition that he needed more strength and vigor with increased age and work. Attacks of rheumatism, with headache and extreme exhaustion, appeared and were treated by the physician without success. Inflammatory conditions of the joints followed, and convulsive attacks with great irritability and mental changes appeared. These were associated with depression of spirits and physical exhaustion. He went to a sanitarium; spirits were interdicted, the diet was restricted, and active eliminative treatment carried out for several months. Recovery followed. He resumed business and two years later began to use wine at the table again, with rich foods. Strong spirits were taken at intervals, for strength. Later rheumatism reappeared, then convulsive attacks which were pronounced epileptic. The physician continued to allow wine at meals, prescribing narcotics to prevent the attacks, until finally death took place from acute pneumonia. In this case, undoubtedly, autointoxication from the use of wines and foods was the special exciting cause of the epilepsy and death. Had abstinence from spirits, rigid diet and careful eliminative treatment been persevered in, the result might have

been different. The poisonous irritants and toxins concentrated in the brain-centers were the exciting cause of the explosions of nerve-energies and the subsequent debility and death.

*Conclusions*

I conclude at this point with a statement of the necessity of recognizing the poisonous action of spirits, whether taken in moderation or excess, and summarize what I wish to make prominent as follows:

1. Alcohol in any form, taken into the body as a beverage, is not only a poison but produces other poisons, and associated with other substances it may develop toxins. Alcohol is also an anesthetic and not a tonic or so-called stimulant. It increases the waste products of the body and diminishes the power of elimination. It also destroys the phagocytes of the blood, and thus removes and lessens the protective power of the blood-cells.

2. Whenever alcohol is used continuously as a beverage, for its medicinal effects, favorable conditions and soils for the cultivation and growth of poisonous compounds are created. These may be neutralized by other conditions and not be apparent in the derangements of the functional activities which follow. Where disturbances and derangements of the nutrient and functional activities of the body are associated with the use of alcohol, their transient character and disappearance by the removal of spirits suggests the causes.

3. The functional and organic symptoms of derangement appearing in those who use spirits in moderation or excess, which quickly disappear by abstinence and eliminative measures, are clear indications of autointoxications from this source. Obscure symptoms of the nervous system in persons who use spirits should always be examined in relation to the toxic origin from this source. Also grave nutrition disturbances should suggest the same cause with, of course, the same treatment.

4. The treatment of all such cases in which alcohol is used in any form should be by antiseptic and eliminative measures, and the supposition should always include the possibility of poison by chemical products formed in the body.

# CONCERNING THE DOCTOR HIMSELF

**A chapter about the doctor's life-insurance investments: What kind of insurance he should take; how much he should invest in it; and how he may select it with intelligence**

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SO much has been said and so many unfavorable things have been written since our insurance affairs have been investigated, that it is high time to correct some of the unfair statements that have been made, and to make mention of some of the good things there are in good life insurance.

The doctor's surplus is supposed to be very great, and yet but few people consider the actual facts of his position. It costs now an average of five thousand dollars for the education of a physician. This is not only his business investment but commonly constitutes his sale-asset.

A man in business must protect his stock with fire insurance. The businessman, if he is so unwise as to carry no fire insurance, and suffers a loss, can possibly borrow capital and in a few years be on his way to success again. If he cannot borrow and reengage in business, he still has his health and knowledge to sell to some other businessman, and he can thus sup-

port his family in a moderate way. But with the professional man, his health, his business and his wealth are all at risk, and every wind that blows, he knows, blows ill to some one. If his is a three-fold risk, then this is a three-fold argument for carrying such insurance as would give his family at least an income equal to interest on the cost of his education.

*Who's to Blame for the Insurance Scandals?*

The insurance companies are to blame for bringing on themselves all that has been said and for all that they have done.

But the people are also at fault because they have demanded something more than life insurance from life insurance companies, and for accepting speculative propositions that are sure things for the company, and speculation is the only excuse that many insurance companies can offer for an existence.

The best is always the cheapest, and yet in life insurance the best is seldom sought, and rarely found. Friendship and personality should offer no excuse for buying anything, and least of all should it be permitted to be a determining factor in the purchase of that which may be the means of supplying, not luxuries, but the absolute necessities of life to the members of one's family.

The physician frequently is offered an examinership by new companies as an inducement for him to carry a portion of his risk with them. An agent who has such a privilege works for a company whose motto is, "Any kind of business at any price." In the interests of the company two things are absolutely necessary. The first is, avoidance of too great familiarity between the life insurance agent and the life insurance examiner. The second is the direct return of the examination paper to the company. The application blank should become the property of the company the moment it passes into the hands of the examiner. The doctor who is so dishonest as to alter, change or materially modify a vital part of his examination and authorize the admission of a questionable applicant is indirectly undermining the foundation of the house which may be the only shelter his own family will have in the future.

*How Much Insurance Should the Doctor Carry?*

Some physicians say they can make more money by carrying their own risk. Others overload themselves and in times of stress are forced to forfeit or make great sacrifices in their savings. The amount which should be carried varies with the individual, and yet a conservative man would do well to place from ten to fifteen percent of his income in an insurance investment. [Isn't this rather large? To the man of moderate income it seems to us this percentage would be burdensome and would practically make other investments an impossibility. What of the man buying a home? How would a sudden and unexpected shrinkage of income affect such an obligation?—Ed.]

Any investment where a man's savings and a limited surplus is concerned should consider three factors. First, security of the sum invested. Second, honesty of the transaction. Third, the amount of gain. The greater the profit the more questionable the enterprise, and the more risk there is to the sum invested. The safety of government bonds make them the most valuable to the large investor. To the small investor the *careful study of the life insurance question*, will reveal much for profitable consideration, but in this, as in any other scheme, a man must know where he is placing his money.

Life insurance properly placed in reliable companies is absolutely secure. It is absolutely honest, and besides protecting estates to the extent of a possible enormous profit, it serves as a saving-bank that will pay at least 3 per cent on our money. It acts as a trust company where our deposits are safe and need give us no worry. There are no taxes to pay for the privilege of our small success. There are no fluctuating values to be affected by panics. There are no dangers from fire or flood, from drought or tornado. It is an insti-

tution that can rank second only to the precepts of the church in its beneficence.

*Different Kinds of Insurance*

While there are only two forms of insurance, there are many kinds of companies, and each company issues many different forms of policies. Of the kinds of insurance the two forms are "assessment and fraternal" and the so-called "old-line life insurance."

The first, or assessment, one should consider the same as he does in protecting his house from fire-loss, only in this instance he is paying less than value received—an injustice to the other members at first and to himself ultimately, as many members of assessment companies have found out to their sorrow. Transient protection can sometimes be cheaply obtained, yet each year that it is carried adds a greater cost to the future premiums and protection. As expressed by a prominent author writing on the insurance problem, "the assessment company lives from hand to mouth, and while daily adding to its obligations, is making no adequate provision to meet them as they fall due in the future. The old line company requires a larger premium to begin with, as it pays the present losses just the same as the assessment company and in addition accumulates a reserve for each policy upon its books, and thus makes sure mathematically, according to the mortality tables, of its ability to meet all losses in the future."

As to the companies themselves, some are conducted for the benefit of the stockholders, others give the policy-holders a little consideration, while a few are truly mutual companies in which all the legitimate profits are apportioned to the members in the shape of cash dividends or additions to the value of the original policy.

There are few if any of the old line companies that are not responsible for the payment of death-losses, but this is only one feature of the many that must be considered in selecting a company to intrust savings with. Unfortunately the usual life insurance agent is either a "twister" or an "untwister," to use the terms seen in a recent publication. By this is meant an excess of zeal, that is utilized in only too many instances in taking advantage of the applicant's ignorance and condemning a rival company or showing an unfair and sometimes misleading and untrue comparison.

*How to Select the Best Company*

There is but one certain way to settle the question, which one of several companies to choose, and that is to secure from each of those under consideration a sample policy of the kind one desires to adopt. From these any one can tabulate all the advantages that any company can guarantee. These consist in the following privileges:

Premium cost; loan values; extended insurance; paid-up insurance; grace in premium payments; cash values; incontestibility; restoration; beneficiary; changes in premium payments and the form of policy. The *most important factor* is mentioned last, and that is the *question of dividends*. In no company can these be guaranteed, and one must form his opinions of future profits, from the actual results of the company in the past, combined with present results and the consideration of the relation of income to expense from the company's conservative management. *The term "dividends" is a misnomer*—in reality it *is an over-charge returned*. Some companies have eliminated "dividends" by offering socalled "non-participating" policies at a reduction of from 20 to 30 percent in the cost of premium-rates, and in many companies this form of policy would be cheaper than so-called "participating" policies, for their "estimated dividends" have never been realized.

There are but few physicians who carry no life insurance, and yet there are still fewer that have any conception of the value or contents of their policy other than as an asset in case of death. The policies of a few companies bear about the

same relation to life insurance proper as the shadow does to the substance.

While hundreds of companies are writing a possible hundred forms of policies, there are really but three forms: First: Term policies, which furnish protection for a certain number of years and then cease altogether. Second: Life policies for protection only, subdivided into two classes, viz., ordinary life policies, on which the premiums are continuous during the existence of the contract, and then the limited-payments policies, on which the insured ceases to pay after a certain number of years. Third: Endowment policies, in which the insured receives a certain specified sum and so becomes his own beneficiary at a certain time agreed upon.

Quoting from an insurance journal of recent date, in an article entitled, "Life Insurance vs. the Savings-bank," is the following: "If the annual premiums per $1000.00 at age 35 were deposited annually in the savings-bank and earned three per cent compound interest until the whole would equal approximately $1000.00. it would take:

Twenty-five years for the premiums on a continuous-payment, whole-life policy; 20 years for 20 premiums on the 20-payment life policy; 21 years for 15 premiums on the 15-payments life policy; 23 years for 10 premiums on the 10-payment life policy; 25 years for the premiums on the single-payment life policy; and 16 years for the premiums on the 20-year endowment policy, to equal one thousand dollars."

Of course, one cannot eat a pudding and also keep it. If it should become necessary to have to dispose of the cash interest in a policy, the guaranteed cash-value of an ordinary life policy should not be less than 50 percent of the amount paid in premiums, nor less than 80 percent of the amount of the premiums in a limited-payment life contract, where the policy has been in force a sufficient length of time to have permitted interest to have accrued on the reserve.

In addition to the above minimum guarantee, in a conservative company, assuming that the dividends will be no less in the future than they are at present, and that the company allows the policy-holder to apply these dividends to increase annually the cash-value of the policy, we find that we can not only get our premiums back in full at the end of a few years but receive a minimum amount of interest and have *our insurance cost us nothing more than the difference* in the amount returned to us over and above the amount of our premiums, and the probable interest we might have earned had the money been invested otherwise.

The moral, if there is any to this tale, is to beware of the two great tragedies of this life, namely, "the not getting of what you want—and the getting of it" (Osler), and that we ever remember, quoting from Ecclesiastes iv:vi:

"Better is a hand full with quietness, than both hands full with travail and vexation of spirit."

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## GIVE!

"Cast not thy pearls"—so pride with scornful tone
Bids us be still and wait, nor lay our treasure
Beneath the feet of them who with a stone
Answer us asking bread, and for full measure
Of loving kindness not one little grain
Of sympathy would offer; yet the heart
Is mighty, and a whisper comes again
From the clear-seeing soul that dwells apart
In majesty of truth, saying, "Not so:
Give of thy bounteous will nor count the cost
Tho' centuries wait thy guerdon to bestow,
Whate'er is good and true shall not be lost:
But every word and deed sprung from the spirit
In nobleness shall fairest meed inherit."

—George F. Butler, M. D.

# CHEMICAL CORRELATIONS IN THE ORGANISM

The significance of some of the disturbances which take place within the body. A lecture delivered before the convention of Naturalists at Stuttgart

By PROFESSOR L. KREHL, Strasburg, Germany

THE union of the various cells and tissues which go to make up the one organism is accomplished not only by the nerves but also by way of chemical action. This is now established as a certainty. But long before this was done physiology and pathology had already surmised it, for on the one hand it was impossible to assume that all the chemical substances utilized by the individual cells were introduced as such into the body with the food. The most, if not all, of those substances were rather thought to originate within the body, and this by the cooperation of several organs. So, also, on the other hand, it had long been generally accepted that some of the substances which originate by way of metabolism were poisonous and would give rise to intoxications if not changed by some organ and thus made harmless. Several of the so-called blood-glands, i. e., spleen, thymus, thyroid, adrenals, and the liver were thought to function in this way. If the destruction or change of these hypothetical products of metabolism does not take place then there arises, according to the teaching of the schools, an autointoxication of the organism.

### *The Doctrine of Autointoxication*

Every physician knows how prominent a part the doctrine of autointoxication has been playing in medicine. There are but few more objects in pathology which are so much and so readily talked about as this autointoxication. And to theorize here was so much the more convenient the less possibility there was of submitting the theory to the test of actual experiment. This way of thinking continues to obtain to a large extent among physicians in the consideration of diseased conditions. I have only to call to mind all the autointoxications which are believed to originate from the intestinal canal. What disease is there that has not been ascribed to such processes or is even today ascribed, to this cause, although Friedrich Müller and Brieger indicated as long ago as 1898 the only ways in which this most complicated subject can possibly be handled. (Kongress für innere Medizin, 1998. Compare also Weintraud, "Lubarsch-Ostertag Ergebnisse," IV.)

The views concerning the disturbances in the interactions between the chemical substances have been derived from observations made in experimenting on animals and in part also from clinical experiences. These views were based upon the observation of organs that were diseased, extirpated or injured, as well as upon the results derived from animal organs administered therapeutically. Along with some very good reports of investigations made we have very vague ones also, and there is much which is not above the rank of mere guesswork and impressions. Some biologists and close thinkers among pathologists were on that account unduly diverted from the study of this subject, especially so when, according to the fashion of the day, such things even as unfermented grape juice were being extolled as true remedies! This much had to be said in order to make it clear that conclusions which necessarily must rest in great part on mere suppositions can result in mere suppositions only and not in real facts, and instead of a theory give us a mere belief or surmise.

### *An Outline of Study*

My object here is to supplement Starling's report in the domain of pathology. I omit from the great amount of material on hand first of all those processes which stand in

connection with the processes that take place in the intestinal canal, for one reason because what takes place in the intestines does not depend alone on the organs of the body but in high degree upon the circumstances of the bacteria present. And, again, because the autointoxications which proceed from the intestines have been discussed of late by Brieger, Müller and Kraus, and have been brought to a conclusion for the time being. (Müller und Brieger, Kongress für innere Medizin, 1898. Kraus, "Lubarsch-Ostertag Ergebnisse," I.)

I also leave unconsidered all those processes which have to do with digestion, absorption, construction and destruction of normal constituents of the body because these belong essentially to the department upon which my confrère, Mr. Starling, is to report. Of course, I cannot leave these subjects altogether unconsidered, but I shall neglect them till I come to discuss pathological processes.

*Influence of the Sexual Glands*

The sexual glands exercise, as Mr. Starling has shown, an influence upon various organs. It may be that nervous processes also here come in in part explanation of these effects, and for this one might refer to Gall's experience, that the extirpation of a testicle of one side resulted in a disappearance of the cerebellum on the opposite side. But this view is by no means confirmed as yet, while the fact of chemical effect is well established. For conception, pregnancy and birth can take place in animals after their lumbar spinal cord has been severed; and when these processes may be interfered with because of a lack of ovarian tissue, this can be remedied by transplanting such tissue elsewhere in the body—so that nervous effects are here certainly to be excluded. The influence of the generative glands extends to all organs during the entire life. And although it must be assumed that many kind of cells already receive the stamp, as it were, of masculinity and femininity in their inception, nevertheless their actual development no doubt is essentially attained under the continuous chemical influences from the ovaries and testicles. (Compare P. J. Möbius, "Die Folgen der Kastration." Halle, 1903.) During the periods of sexual maturation, their development and their shrinking, these influences reach a specially high degree.

If the chemical influence of the generative glands is eliminated, then the body undergoes the well-known postcastration changes. These need not be mentioned here in detail, since they would be necessarily only descriptive. One important thing must however be remembered, namely, that the postcastration phenomena are less characteristic, or are wanting altogether, if the castration was done in later life, especially after the expiration of the period of sexual maturity. The contrary is the case when castration is done during youth, for then the phenomena are highly developed, although the observations on the effects of castration performed in childhood are by no means sufficient.

*Psychic Change Caused by Removing the Sex Glands*

If the glands are removed not too late in life then there ensues a change in the psychic nature (*psyche*) of the person; there is a loss of some of the many characteristic sexual peculiarities. And here it is where the greatest differences show themselves in different individuals, depending in part upon the person's individuality and in part upon the time of life when castrated. Sexual sensation and expression, which indeed usually disappear after castration, may remain perfectly intact, and even though a field marshal like Narses was a castrate, yet, as a matter of fact, not every eunuch need possess the qualities of men like him.

A fundamental change is said to take place in the metabolism of the person after the removal of the sexual glands in that the fat deposits are very much increased at the decrease of fat oxidation. Qualities were ascribed to the products of the generative organs that enter the circulation similar to some extent to those of the products of the thyroid gland. Some investigators on metabolism have seemed to speak in that sense. (Compare Lowy und Richter, *Engelmann's Archiv.*, 1899. Suppl.) Others, again

(Lüthje, *Archiv, für experimentelle Pathologie*, 48 u. 50. Compare Zunz, *Archiv für Gynekologie*, 78), exclude a direct effect of testicles and ovaries on the metabolism of fats, and the socalled common experience of life does indeed not make it probable. The fact is that only domestic animals that are kept under artificial conditions do become fat regularly after castration. In human beings and animals living in freedom it depends altogether on the circumstances of life. This agrees perfectly with Lüthje's ideas, which were arrived at after the most thorough analysis of the subject of metabolism, which are to the effect that any accumulation of fat in the body is produced indirectly, namely, by a change of temperament.

*The Nervous System and the Sexual Glands*

How strongly our nervous system stands under the influence of the sexual glands is well known from common life, art and literature. It shows itself to a certain extent in its gravest form by the ease with which psychoses develop just at the turning points of life, at which periods we have a right to assume a qualitative and quantitative change in the glandular secretions. To a smaller extent we notice this psychic change so frequently accompanying menstruation, and which may for the time being pass over imperceptibly to a complete change of character. (Compare Wollenberg, *Monatsschrift für Kriminalpsychologie*, 1904, p. 36.)

It is just through the influence exerted by menstruation that the fact was recognized that the internal secretion of the generative glands is augmented periodically or is even altered. Female life (masculine life is similar, although observations about it are less marked) runs in periods so far as it relates to the generative glands. (Van de Velde, "Ovarialfunktion, Wellenbewegung und Menstrualblutung," Jena, 1905.) Pregnancy and birth are also influenced by these periods in which fluctuations of glandular activity regularly recur. The variations of the ovarian internal secretions have their influence on the multifarious processes of the organs individually; on the heart-beat, on the respiration, and on the temperature. All these have regular periodic fluctuations, and when in addition there come also cosmic factors to these periods (Arrhenius, *Skandin. Archiv f. Physiol.*, VIII), then we see how intimately connected we are with Mother Earth!

*The Blood after Sterilization*

A change of the blood in the sense of an incipient anemia was noticed in animals after a removal of the ovaries. (Brener und Van Seiler, *Archiv für Experimentelle Pathologie*, 50, p. 169.) This is of special interest because the development of chlorosis was, by a very respectable authority, connected with disturbances of the female generative organs. (Von Noorden, "Die Bleichsucht," in Nothnagel's "Handbuch," 8, p. 17. American edition, "Diseases of the Blood, p. 425.)

It can well be imagined that abnormal chemical products of the ovaries would interfere with the composition of the blood-elements, especially the erythrocytes. As an analogy for this could be adduced the influence of the generative glands on the entire condition of nutrition.

There is in principle a similar development in the natural climacteric as in castration. It is seen above all in psychic and nervous changes, which have the greatest similarity to many phenomena that we notice in neurasthenia, both in the psychical and in the bodily sphere, and this may interestingly explain also in the main some of the symptoms of the neurasthenia.

On the part of bodily phenomena we notice changes and unsteadiness in the innervation of the heart and blood-vessels. These irregularities show themselves very commonly during the disappearance of the menses and cease altogether in the menopause, or at least are greatly mitigated then. It is therefore natural to think that at those periods the products of the generative organs become either qualitatively changed, and so cause those phenomena, or that those normal products are discharged with an extra intensity by fits and starts in the way that glandular secretions

are generally wont to do before they stop altogether.

We must mention specially the influence which the generative glands have upon certain individual organs. First of all, there is a certain relation to the bones. (See M. B. Schmidt, "Lubarsch-Osterag Ergebnisse," V. 1898.)

This relation, admittedly not very clear, is quite complicated. The growth of the bones, it will be shown later on, very likely is influenced by several glands, for example, by the thyroid and pituitary. To these belong also the sexual glands. It is claimed that after castration the long bones of the extremities become larger, and have been so described.

*Changes in Bones of Pregnant Women*

A process akin to osteomalacia takes place normally in the bones of pregnant women, only it keeps within certain bounds. (Compare Hanan, "Fortschritte der Medizin." 1892. Also Von Recklinghausen, "Festschrift zu Virchow's 70tem Geburtstage.") Lastly, we know from Fehling that osteomalacia certainly stands in some relationship to the ovaries and to pregnancy. (Fehling, *Archiv f. Gynekologie*, 32 and 39.) Extirpation of the (evidently diseased) ovaries cures the disease with certainty. When glands are removed or perish, we see that the growth of bones becomes irregular and their symmetry and normal size cease, some parts becoming abnormally large; this we observe not alone in cases of removal of the testicles but of the thyroid and hypophysis as well. About the rationale of this I shall speak further on. In the case of osteomalacia it will have to be assumed that the characteristic process ultimates in the action on the bones, similar to that in pregnancy, only in an aggravated measure, and here on account of an abnormal activity of glandular follicles. Whether we have here a diseased increase of a normal process or a fundamentally new one remains undecided.

Freund tells us (H. W. Freund, *Deutsche Zeitschr. f. Chirurg.* 18 and 31) that in pregnancy there is very often a change in the thyroid gland, which more usually amounts to tumefaction; this was noticed to take place even under the influence of menstruation. It is not very rare, either, for a struma to develop from such a case. It is clear that there is a demand for an increase of action in the thyroid gland during pregnancy, and this is effected in a chemical way by the generative glands. The periodic functional swelling of the organ (thyroid) gives rise to the development of a hyperplasia.

Other analogies for this process could be adduced along this line. As Starling has demonstrated, there arises a tumefaction of the lacteal (mammary) glands and of the uterus. It is claimed that in connection with the functional hyperplasia of both of these, which are entirely of a physiologic character, there were seen the development of genuine neoplasms, carcinomata in some instances, myomata in others. Uterine myomata depend doubtless upon a certain condition of the ovaries, as the results of castration prove. Should this process be confirmed, it will then become necessary for any theory of tumors to consider chemical processes and a certain functional influence of certain organs upon the tissue in which the tumor develops, at least to consider some influence upon the soil in which the cause of the neoplasm makes itself felt.

*The Fetal Organism and that of the Mother*

During pregnancy there is a lively chemical interchange between fetus, placenta, and the mother. It is a great question here how far the fetal organism is to be regarded as something foreign to the mother's organism. This question is of special interest, first, because we know now that the constituent parts of body cells of a foreign organism produce very definite poisonous effects when they get into the circulation; concerning their nature (especially their relations to albumin) the discussions have not as yet been concluded (compare L. Blum, "Zusammenfassende Uebersicht über Präzipitine," *Zentralbl. f.*

*Pathol.*, 17. 1906, p. 81); secondly, because at the termination of pregnancy a diseased condition has been observed which is in many respects like the "tissue-intoxications" (compare Morawitz, "Ergebnisse der Physiologie," IV, 1905), if we may so demominate them, viz., eclampsia.

*Eclampsia Now Better Understood*

Much of this latter remarkable disease is now explained. (Compare papers by Fehling and Wyder, Deutsche Gesellschaft für Gynekologie, Giessen, 1901.) The most important fact would seem to me to be that the disease corresponds with the characteristic postmortem conditions, which consist essentially in multiple coagula and necrotic and hemorrhagic spots in the liver, and which will enable us to make an anatomic-pathologic diagnosis independent of any antemortem medical information. The necrotic spots in the liver seem to play a great and significant part. Furthermore, there must be noticed the intimate connection of eclampsia with the later periods of pregnancy, and that it is very rare that other conditions of the uterus are present in the same. It is very dangerous, and it is apparently very rarely repeated in the same person. The best treatment is a rapid delivery.

A condition of some kind of intoxication has always been suspected in eclampsia. At present there ought to be no doubt that the poison does not come from the mother's organism but from the fetus, or else the placenta, more probably the latter. We are, at any rate, to be thankful to Liepmann who demonstrated from Bumm's clinic the interesting fact that the placenta of an eclamptic parturient woman is poisonous to animals as compared with that from a healthy parturient one. (Liepmann, *München. med. Wochen.*, 1905, No. 15 and 51.) That poison would likely belong to the group of the socalled ferments or toxins. The necropsy at least corresponds to the assumption, for it shows indubitable analogies to what was formerly designated as ferment-intoxication, similar to that which is found in the death from snake-bites.

The thought lies very near that substances of the kind mentioned pass continually from the placenta or fetus, respectively, to the circulation of the mother. In her normal condition those substances produce only mild and unimportant disturbances, and functionally at least of no consequence. To these may also be reckoned the renal changes of the pregnant female.

It is well known that a large percentage of pregnant women have albuminuria. The epithelial changes which are the fundamental cause of it and which make on us the impression of a toxigenic condition of things are what is regarded in severe cases as "pregnancy kidney." Formerly it was discussed whether and how far eclampsia were of a uremic nature, i. e., how far it depended on the kidneys; at the present we have a right to regard pregnancy kidney and eclampsia as a common result of an intoxication proceeding from the uterine contents, whether that be a not indifferent intoxicant coming into the blood of the mother in quantities greater than normal or whether that effective intoxicant be a qualitatively special poison. We know well how easily the biological effect can be influenced through slight chemical changes in such bodies.

*Action of the Thyroid*

It is certain that the system of the thyroid gland accomplishes its effects in the organism in a chemical way. According to some the thyroid delivers certain substances into the circulation which "detoxicate" the toxins. (Compare Blum, *Pflueger's Archiv*, 105.) Another and more prevalent view which I think has a higher degree of probability is, that the bodies which are elaborated in the thyroid go to certain organs and influence their *stuff-economy* metabolism. What these different substances are is not as yet known with certainty. The substance sought is perhaps in reality a multiplicity of bodies. We know one, which comes near to globulin. (Compare Oswald, *Hofmeister's Beitraege*, 545, p. 2. The same in *Virchow's Archiv*,

169, p. 444.) It is possible that the active principle contains albumin and iodine.

It is necessary for the development of the entire body, most of all the skin, the mucosæ, the bones, and the nervous system and with it for the psyche (the intellectual and moral parts of man) that the thyroid-bodies should be secreted into the circulation continuously. Should these fail, or fail to be present in sufficient quantities, or be altered in form, then the entire organism suffers grave changes in its numerous organs. A thorough description of these wonderful phenomena, however, would lead us too far.

When there is deficient thyroid-activity in youth, then there always follows defective growth of the bones in length, due to a modification of the processes at the epiphysis which normally control osseous development. It is to be noted that in fetal life a deficiency of thyroid does not affect the bones. (Compare Dieterle, *Virchow's Archiv*, 184, p. 56.) The sexual organs suffer in their development. The skin changes in the manner it does characteristically in myxedema; hair and nails become diseased; the circulation is lowered; the heart-beat becomes slower; the temperature is lowered. Psychically the individual thus affected changes in all gradations and varieties from apathy and indifference down to deep melancholy and complete idiocy.

[*To be Concluded.*]

# THE IDEAL PHYSICIAN

The valedictory address of a young physician, given at his graduating exercises. An appeal for high ideals in our profession that should inspire and help both young and old

By HENRY R. HARROWER, M. D., Battle Creek, Michigan

IT is taken for granted that the "ideal physician" does not exist; but a mental picture of him, nevertheless, must be unceasingly and clearly held in view, especially by those who aspire to success in the great art of medicine. The mind should be daily brought to bear on this conception of a perfect man, the imitation of whom is the continuous desire and daily endeavor of every physician who would be truly noble and great.

The physician, of all men, should approach the ideal. He should be Christian in all his dealings, and not mercenary; his aim should be the uplifting of humanity, and not merely the securing of a fee. He should make no distinctions between persons, treating both rich and poor equally well. Man's misfortunes are an occasion for the testing of his skill, and their sicknesses a Divine call to do the offices of love as well as to minister to their bodily needs.

Some able writer has said: "The true physician is a scientific man, a seeker after knowledge, knowledge which is capable of adding to the comfort and prolonging the life of human beings. So long as he is impelled by the scientific spirit, the physician will add daily to the sum-total of knowledge and will make practical application of that knowledge in the work of mitigating the ills of humanity. If, on the other hand, the commercial spirit become the dominating force in his professional life, his quest for knowledge will become secondary to a quest for gold, and his efforts to lighten the ills of his patients will give place to a systematic effort to lighten their pocketbooks."

Dr. William Osler in his excellent little book, "Counsels and Ideals," says: "Always seek your own interests, make of a high and sacred calling a sordid business, regard your fellow-creatures as so many tools of trade, and if your desire is for riches, they may be yours; but you will have bartered away the birthright of a noble heritage, traduced the physician's well-deserved title of

the Friend of Man, and falsified the best traditions of an ancient and honorable guild."

The physician, as no other, has the opportunity to minister to the spiritual needs of the sufferer. Sir Wilfred T. Grenfell, the great fisherman-physician of the Labrador coast, recently said in this connection: "It seems to me that there is only one way to reach the soul—that is through the body. For when the soul has cast off the body we cannot reach it at all." The ideal physician does not overlook this great privilege of ministering to his patients in the higher life as well as in the physical life. Every time that he encounters sorrow or suffering, the opportunity is given him to show the love of God in kindness, and be assisting in the fight against disease to the very best of his skill and ability.

*Efficiency not Enough — Manhood Needed*

The equipment of the ideal physician does not alone consist in having a complete and first-class outfit and in being well versed in the many intricacies of his profession, but the many attributes which go to make up the man are, I believe, even more valuable. Efficiency is excellent, but it is not enough. The good word of the farmer or laborer is worth more than all the degrees of a learned university.

"The most important thing about the physician is *quality*—quality in his knowledge, his work, his intuitions, and his own self. The knowledge of a scholar who holds up his head among the wise and is not ashamed; work whose finish denotes the hand of a master; intuitions only possible to the trained and sympathetic mind; the manners of a gentleman, and back of them the morals of a Christian and the kindly heart that feels for human ills."

The ideal doctor is a profitable man to know, his very presence is medicinal. His character is self-evident, and everyone likes a room better with him in it than out of it. His speech is always mild and firm; he has an inclination to amiability, a tender commiseration with the suffering and an incorruptible purity—the noblest qualities of mind and heart. He looks on every man as his brother, he treats every woman as his own mother or sister, and every little child recognizes in him that which prompts it to run and take his hand in trustful confidence.

A certain kindliness and bigness of heart characterizes the ideal physician; the manner in which he treats others is so different form that of the average layman—the doctor must needs be broader-minded and more charitable, because of his better and deeper insight into men and their actions.

Many a man has "tramped so long through this muddy world and taken such stain in his travels that he has lost the thoughts of the solitudes and the sacred places." It is the earnest purpose of the ideal physician to bring him back again to these places and to lead the weary mind to rest on the beautiful things of nature and of God. The sick and worn are enthused, encouraged and supported by the cheery presence and comforting words of their medical adviser.

*The "Business" of the Physician*

The therapeutic treatment of his patients is almost the least of the duties of the ideal physician; his great work is being the education of his charges in hygiene—"making therapeutics unnecessary." He also is able to help in many other ways with "advice in their troubles, sympathy in their sorrows and aid in their misfortunes." Dr. Richard Cabot, of Boston, has well said that "encouragement is one-third of the business of the physician." In this connection, the late Dr. W. H. Herdman of the University of Michigan often quoted in his lectures:

> Canst thou not minister to a mind diseased,
> Pluck from the memory a rooted sorrow,
> Raze out the unwritten troubles of the brain,
> And with some sweet oblivious antidote
> Cleanse the stuffed bosom of that perilous stuff
> Which weighs upon the heart?

And then he used to add: "If you cannot do this you are not a true physician."

*Do not Follow—"Set the Pace"*

Originality in his ideas is a strong feature of the ideal physician; he draws his own conclusions and never falls into the per-

nicious practice of allowing others to do his thinking for him. He is generous and broadminded enough to meet men of all schools, to give and to receive that which has been demonstrated best. He is well acquainted with his tools and prescribes what he considers to be the best possible remedy or measure indicated, and he does not take it for granted because someone else has tried a certain remedy with more or less success, that it, and no other, should be used in this similar case. The whole matter is carefully and thoroughly traced out to the foundation, and those principles which form the base of medical science and knowledge are brought to mind, and the case is treated accordingly and withall with happy results. The original man does not do things according to custom. He does not follow in the footsteps of his associates, he sets the pace; and every increase in his knowledge leads to a greater simplicity in his methods of treatment.

It is said of a well-known artist that he had for his motto: "No day without a line." He meant by this that each day should see his work improve a little. This is also the motto of the ideal physician: "No day without a line"—without learning a little more, without loving a little better, without being a little more useful.

The ideal physician is ambitious, he is wide awake to learn the most recent advances made in the science to which he has devoted his life. He studies and works with the one desire of being a lasting benefit to the world; and with him the desire is invariably to attain. But though unlimited ambition is good, he never once allows it to lead him further than he can safely see his clear way.

Many a practician is not a man burdened with a too lively sense of duty to others; his one desire is to be successful—perhaps to amass money and property, to become influential, or to gain a "reputation"; but success is not merely the acquisition of wealth, regardless of how it is obtained, nor of reputation—bought at any price. Real success is something ennobling, inspiring and energizing; something that has within itself an appeal to the best that is in every man; something worth fighting for. The ideal physician never courts what so often is supposed to be success and what Dr. Oliver Wendell Holmes calls "success in its vulgar sense—the mere gaining of money and position."

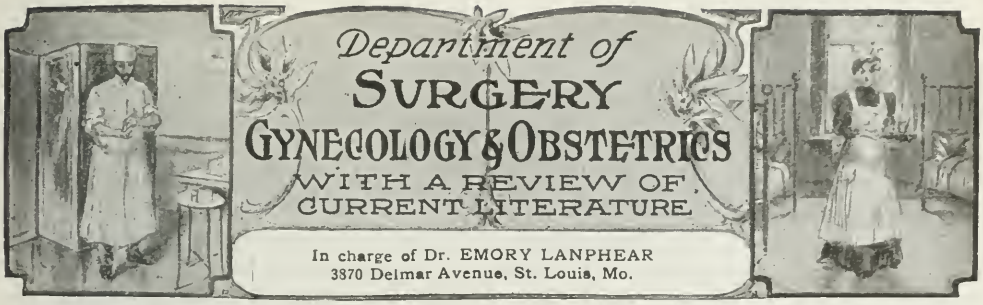
The ideal doctor is more than a skilled laborer—a man who by experience has increased his usefulness and pecuniary value as a worker. The physician's field of usefulness is unlimited, and he follows his profession with an interest such as no workman, no matter how skilled, can put into his trade. Referring to this thought Dr. Osler writes: "The practice of medicine is an art, not a trade; a calling, not a business; a calling in which your heart will be exercised equally with your head."

In this connection I will quote a paragraph from an address given by President Faunce of Brown University: "Trade is occupation for livelihood; profession is occupation for the service of the world. Trade is occupation for joy in the result; profession is occupation for joy in the process. Trade is occupation where anyone may enter; profession is occupation where only those who are prepared may enter. Trade is occupation taken up temporarily, until something better offers; profession is occupation with which one is identified for life. Trade makes one the rival of every other trader; profession makes one cooperate with all.

"The world is awakening from its lethargy —today there is a growing passion for truth, and it is the privilege of every physician to cultivate this. Let us remember that the nobler virtues are developed, not by concentrating our lives upon self-interest, but by being useful, each in our place, in making the world better and brighter and our fellows healthier and happier.

"The world is our country, to do good is our religion.

"To have striven, to have made an effort, to have been true to certain ideals, these alone are worth the struggle."




# DISEASES OF THE GALL-BLADDER

The formation of gallstones, their significance and the symptoms which they may cause; with some remarks upon gall-bladder surgery, its difficulties, and the operations of choice

By G. P. THOMAS, M. D., Spokane, Washington
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MODERN abdominal surgery has done much of late to clear up and let the light of knowledge into that formerly unknown region of our anatomy, namely, the appendages of the liver.

This accurate knowledge now possessed by us is due largely to the work of Murphy, Mayo Robson, Moynihan and the Mayos. When we consider that our best men preceding them, and many who are yet actively operating for these diseases, had and are having an admitted death-rate from simple cholecystostomy of 20 to 30 percent, and for cholecystectomy nearly 40 percent, to say nothing of the partial failures from not getting duct-stones, permanent fistulas, hernias and repeated attacks of colic from kinking of the common duct; to these we might add incurable dyspepsia from stomach-adhesions and gall-bladder-peritoneum suture of the old two-stage operation, our debt of gratitude to the above-named surgeons can best be appreciated now that the death-rate is about one percent or less for simple cholecystostomy and three percent for the complete removal of the bladder.

*Bowel Infection Causes Gall-Bladder Disease*

The origin of the non-malignant gall-bladder diseases may be safely accredited to infection, and mostly from the gut, and it is generally believed that stones arise from the same cause. We must admit, then, that the means at our command for preventing these troubles are very limited, and like the poor, they will always be with us.

The percentage of the total adult population over thirty years of age, who have gall-stones, is variously estimated at from 10 to 20 percent, the female portion being much greater than the male.

When we add to this the number of people under thirty who have stones, and the number of all ages who have other inflammatory troubles of the gall-bladder, we can begin to see the enormous importance of this subject.

It will be remembered that the common duct is formed by the hepatic duct, joined in its course by the cystic duct, and, again, about one inch from its termination by the pancreatic duct of Wirsung emptying into the duodenum four inches from the pylorus.

*The Formation of Gallstones*

It is generally believed that stones form primarily only in the gall-bladder, but they may be found also in any portion of the ducts.

Statistics show that in at least 15 percent of cases of operation for gallstones one or more of the ducts will contain a stone. There are many vague symptoms in the form

of dyspepsia, constipation, epigastric uneasiness, etc., which are, I think, rightly attributed to gall-bladder disease and stones, but the classical gallstone colic is well described by Dr. W. J. Mayo in substance as follows:

The initial symptom of the socalled "gallstone colic," is a sudden attack of pain in the midline which passes through to the back and right or left side. The pain is usually very severe and comes on at any time without warning, the cessation being as sudden as the commencement.

The feeling of relief is attended by vomiting or by a feeling of movement of gas, or is brought about through the administration of morphine or an anesthetic. The patient feels quite as well as before; there is no quickening of the pulse or elevation of temperature.

### *What Causes the Pain*

The pain is caused by the sudden obstruction of the cystic duct, either as the result of the lodgment of a stone or by the swelling produced by infection. The gall-bladder readily becomes filled with serous fluids, producing spasm of its muscular structure. When this contraction relaxes, permitting of escape of contents, the attack is over.

As the only gland draining this area lies beyond the point of obstruction, there are no constitutional symptoms. The attacks last from a few minutes to six or eight hours, occurring at various times and may disappear for years.

In the second stage of gallstone disease the obstruction is in the pelvis of the gall-bladder and fails to become relieved. The attack comes on just as the other does, but continues in a more or less modified form for a number of hours or days.

Now for the first time the pain passes into the right side in the region of the gall-bladder. The stone may still be dislodged, but permanent changes have taken place in the gall-bladder wall and there will not now be entire relief of symptoms.

The bile may be absorbed and the viscus remain distended with a clear mucoid liquid, giving rise to a cystic tumor. The fluids may be slowly absorbed, producing contraction. If the infection is acute, empyema may result, and occasionally gangrene with perforation.

### *Pus Infections with Impacted Stones*

Impacted stones with severe infection often slough into the duodenum, transverse colon or stomach, in the order mentioned, and sometimes perforate backward into the liver-substance and form diverticula. In this stage, although the gall-bladder may be filled with pus, there is seldom much elevation of pulse or temperature on account of poor lymphatic supply of the gall-bladder, from the fact that the single receiving gland still lies beyond the obstruction.

The third stage of gallstone disease is not so well marked and consists of the lodgment of stones in the cystic duct. Movement of the stone in the duct means pain. As a rule obstruction is not complete but permits intermittent drainage.

With infection and obstruction and a contracted gall-bladder the symptoms become very marked. The duct is not easily distensible and has abundance of lymphatics, so that sudden chill and high temperature may accompany movement of the stone. These attacks without jaundice come on irregularly, the patient being in rather constant distress and losing weight. There usually is tenderness in the gall-bladder region upon palpation.

The fourth stage occurs when the stone passes into the common duct. Up to this time the trouble can be said to be local and the removal of the calculi with or without the gall-bladder can be expected to terminate the disease.

### *The Significance of Jaundice*

Involvement of the great duct of the liver is most serious, as all of the liver-ducts are now exposed to infection, and the functions of the organ seriously interfered with. When the stone first passes into the common duct there is jaundice, but after a long lodgment, usually by developing diverticula, the stone having a ball-valve action, the jaundice may

nearly disappear and the stone lie quiescent for a great length of time.

If only one stone be present, there usually is jaundice; if many, it may be absent. As a rule, however, the patient with stones in the common duct is more or less jaundiced and suffers at times from a peculiar chill and rise of temperature attended by colicky pain or gastric distress, which goes by the name of Charcot's fever. The temperature may range as high as 107.5°F.

In the early stages the jaundice due to stones is intermittent and may vary day by day, while that due to tumor or malignant disease is constant, generally painless and often accompanied by tumor.

The pains are not so acute as in typical gall-bladder colic on account of the absence of contraction of the muscular gall-bladder. In 30 percent of the cases operated upon no jaundice is present at the time of operation. There is great danger of involvement of the pancreas, acute fatal pancreatitis rarely taking place, fat necrosis somewhat more frequently, and chronic pancreatitis most common of all.

Jaundice in gallstone disease means involvement of the common and hepatic ducts and may be due to four causes: first, the infection which has extended downward from a cholecystitis; second, by the passage of calculi into the duct; third, thickening in the head of the pancreas, compressing the duct; fourth, tumor, usually cancer.

Jaundice has great surgical significance. It indicates that the disease is no longer confined to an organ which has but little function and that simple means of relief no longer suffices.

When produced by a descending infection from the gall-bladder it comes on immediately after a simple colic which has disappeared in the usual time, and the yellow hue lasts but a few days and is not accompanied by a marked loss of flesh. When it has continued for three months without intermission it is incurable by any means, because of the permanent blood-changes.

Gallstones are foreign bodies and are actually and potentially a grave menace to their hosts. The mortality of operations for simple gallstone disease is less than one-third of one percent, and the rule is that the patients have ample evidence to enable diagnosis and removal during this favorable period. More than half of the patients operated on at the present time have passed beyond this simple condition, but if the disease is still confined to the gall-bladder and cystic duct the mortality is not above three percent.

When the stones have passed into the common duct, which occurs in about 15 percent of the cases operated on, the average mortality is not far from 10 percent. The mild cases without infection have a mortality of about three percent; with infection and jaundice about 16, and with complete obstruction 34 percent. The mortality in operations for cancer is very large, and this condition is often found when least suspected.

### *The Operation of Choice*

Cholecystostomy is the operation for gall-bladder stones proper, and should have a death-rate nearly *nil*, but when stones are found in the ducts, a distinct death-rate must be expected, probably nearer 10 percent. When found in the cystic duct requiring incision it is often best to remove the bladder to prevent stricture and recurrence of symptoms.

All gangrenous and thick-walled gall-bladders should be removed to prevent further infection, permanent fistula due to inflammatory diseases of its duct, or malignancy. The same is true when it is full of pus or cystic.

While simple drainage will cure some cases of cystic gall-bladder, this cannot be depended upon, and complete removal is better. It is sometimes necessary in diseases of the common duct to make an outlet for bile by joining the bladder to a gut and, for this reason, it is well to leave it in for that purpose, where stones are removed from the common duct, in the event of the destruction of its function.

### *The Importance of Drainage*

In removal of stones from any of the ducts drainage is most important. I have but

recently lost a case because of the failure of the drain. After four days of comfort the patient suddenly developed severe abdominal pain and died two days later, with his abdomen full of bile.

The tube must be placed and fastened well into the incision in the duct, and kept there until nature has built a good protection wall around it to the surface. The building of this wall will vary greatly in different individuals, and is always an unknown quantity.

Pancreatitis, a common accompaniment of gall-bladder disease, is generally relieved by drainage of the gall-bladder or its ducts.

Removal of the gall-bladder, if done from below upwards after clamping the cystic duct and its artery, is not a difficult procedure and during its removal care must be taken to leave a portion of its serous surface attached to the liver for over-suturing.

The cystic artery may be tied separately from the duct and the duct drained if it is thought necessary, but this necessity is not often present if the diseased gall-bladder has been removed.

Gastric ulcers and their sequelæ are frequently seen in persons with gall-bladder disease, due, I suppose, to its effect on the gastric secretions, perverted secretion being the accepted cause of ulcer.

*The Difficulty of Gall-bladder Surgery*

I have operated for gall-bladder disease about two hundred times, and feel quite as much at home in that as in any other abdominal surgery, but I am occasionally rather forcibly reminded of the saying that has been accredited to Kehr, "that one should not do gall-bladder surgery until he has done at least one hundred other abdominal cases."

Cholecystitis, even when not cystic, is generally manifested by severe and persistent vomiting, which is immediately relieved by drainage, several such cases having come under my observation.

In drainage of the gall-bladder it is well to remember that it must not be attached to the peritoneum, if such attachment requires much traction on it, as traction on the gall-bladder may bend the common duct and prevent bile passing through it. One such case came under my observation with a permanent fistula, which was cured by simply releasing the gall-bladder and dropping it back.

Drainage through a large rubber tube with the cut edges of the bladder inverted around it, fastened with a purse-string suture, will permit the bladder to be left wherever desired.

Stomach and duodenal adhesions to the liver should, when possible, be separated, and all raw surfaces overstitched.

It is my custom to examine for gall-stones in all abdominal affections requiring an incision large enough to admit a hand, and it is surprising how many are found to have stones where none were suspected.

When stones are found, if the condition of the patient will permit, they are removed and drainage instituted. This requires but ten minutes' additional time if the ducts are free from stone, and the gall-bladder not contracted.

The best incision for gall-bladder work is the four-inch, mid-right rectus one, with partial delivery of the liver. If duct-stones are found, this makes them most accessible, and permits the complete closure of the incision with drainage of the bladder through a small stab-wound. The tube is passed into a flat whisky flask fastened in the dressing, thus preventing their soiling and wound infection.

In conclusion I would add that gastralgia, wind-colic, etc., I believe, are quite as often due to gall-bladder disease as to appendicitis, and that one of these conditions will account for a very large majority of all abdominal pains; and further, that any such pain which is not relieved by one dose of morphine is more safely treated by surgery than by any other means.

# REPORT OF THREE NEPHRECTOMIES

Two of these cases were of calculous pyonephrosis, the third being sarcoma of the kidney, occurring in an infant eight months of age—the last being relatively rare

By HERBERT A. BRUCE, M. D., F. R. C. S. (Eng.), Toronto
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CASE 1. Mrs. P., aged 50 years, admitted under my care into the General Hospital on March 12, 1907. She gave a history of having first noticed a lump in her right side about three months ago, since which time it has increased considerably in size. She has had colicky pain across the front of her abdomen for about a year, relieved by eructations of gas from the stomach. Has had to pass urine two or three times during the night. The patient is quite anemic and complains of weakness.

On examination a large tumor was to be felt in the right lumbar region, extending forward into the right hypogastrium. It was nearly twice as large as the normal kidney but having the shape of the kidney. It was freely movable and could be pushed back into the right lumbar region. It was dull on percussion.

The urine was taken by segregator, examined, and the following condition found: The urine from the right kidney contained a large amount of albumin, many epithelial cells and very many pus-cells, no casts, and a few red blood-cells. The left showed a trace of albumin, some epithelia and pus-cells.

The diagnosis was pyonephrosis, either of tubercular or calculous origin.

### *A Description of the Operation*

Nephrectomy was done on the morning of March 25, 1907. The patient was etherized and an incision about four inches in length made in the right lumbar region, extending from the last rib downward and forward, passing an inch to the inner side of the anterior superior spine of the ilium, in the direction of the middle of Poupart's ligament. The kidney was brought up into the wound and the colon pushed inward from the front of it.

In removing the kidney the ureter was first isolated and tied low down with silk, clamped above this and cut between. This facilitated the isolation and ligation of the renal artery and vein—the artery being first tied and lastly the vein. The kidney was then removed—the same consisting simply of a large sack containing pus and debris, with a large stone filling the pelvis.

The transversalis fascia and the muscles were then brought together with chromic gut, and a tube was left in at the posterior end of the wound for drainage. The skin was closed with three or four interrupted S. W. G. sutures, and the remainder with horse-hair. The operation took half an hour.

On March 26, twenty-four hours after operation, the amount of urine passed was 14 1-2 ounces, containing 1.6 percent of urea and a trace of albumin.

On March 27 the urine passed during the last twenty-four hours was 37 ounces, urea 1.4 percent, no albumin.

On March 28 the amount of urine passed during the previous twenty-four hours was 70 ounces, urea 1.6 percent, trace of albumin.

On April 5 the patient was doing well. Urine passed per day averaged about 50 ounces. Percentage of urea on the above date was 0.9, but ran about 1.2 to 1.3 percent for a few days previously.

On April 20 the amount of urine passed daily averaged about 60 ounces, with 1 percent of urea.

On May 4 the patient had gained considerably in strength, and as the wound was almost healed she was allowed to go home.

Case 2. Mrs. M., aged 60 years, first seen on the 26th of February, 1907. She gave a history of having had very poor health for a number of years. For the last two years she had been dieting. During the last year she had been much troubled with nervousness and sleeplessness, for which she took whiffs of chloroform. She always had a feeling of discomfort when anything tight was put around her waist. She was not able to walk at times on account of the pain and discomfort in her right side.

On February 27 uranalysis showed: Reaction, sharply acid. Specific gravity, 10:10. Albumin, very faint trace. Sugar, none. Microscope, many epithelial and very many pus- and white blood-cells, few red blood-cells, no casts.

On February 28 the segregator was used and the urine found to contain:

From the right kidney: Albumin. Many degenerated round epithelial cells. Very many pus-cells. Very many red blood-cells. No casts.

From the left kidney: Albumin, a trace. Few red blood-cells. Few pus-cells. Few round epithelial cells. Single hyaline cast.

A tumor was felt in the right hypogastrium, kidney-shaped but twice the size of a normal kidney. This could be pushed back into the right lumbar region.

*The Urine and Blood-Count*

On the 2nd of March the segregator was again used. The urine from the right kidney contained a few epithelial, very many pus-cells and some albumin, but no casts. The urine from the left kidney contained a few epithelial cells, a few pus-cells, hyaline casts and a trace of albumin. The urine dropping into the tubes had an entirely different appearance, the left tube being clear while the right was quite cloudy. The right tube filled up more quickly than the left. Urea, 1.8 percent.

On the 4th of March the blood-count was as follows: Red blood-corpuscles, 4,270,000. White blood-corpuscles, 7600. Hemoglobin, 80 percent.

A diagnosis of tubercular or calculous pyonephrosis was made. Details of operation were the same as in Case 1. In separating the upper part of the kidney a small tear, about an inch long, was made in the peritoneum, which was sewn with catgut. The operation took thirty-five minutes.

*The Postoperative History*

On March 9, twenty-four hours after the operation, she had passed 30 ounces of urine.

On March 10, forty-eight hours after the operation, the urine passed in twenty-four hours measured 31 ounces, and uranalysis showed many epithelial and pus-cells, but no casts and only a trace of albumin.

On the morning of March 11 the urine passed during the previous twenty-four hours measured 46 ounces. The percentage of urea was 2.2.

On March 12 an examination of the urine showed no albumin and no casts, but a great many pus- and white blood-cells. It contained 2.2 percent of urea.

On the 13th of March the total amount of urine passed during the previous twenty-four hours was 32 ounces. Percentage of urea was 2.4.

On the 14th of March the urine passed in twenty-four hours measured 28 ounces. It contained 2.3 percent of urea.

March 15 examination showed a little albumin, some pus-cells, no casts, and urea 2.2 percent. The amount of urine passed during twenty-four hours was 31 ounces.

March 21 there had been practically no change in the uranalysis, which was made daily. Urea remained at about 2 to 2.2 percent. Pus-cells had greatly dimished. The amount of urine passed during twenty-four hours varied from 27 ounces to 39 ounces. On the above date the stitches were removed.

On the 22nd and 23rd of March the urine measured 35 ounces. It contained 2 percent of urea.

On the 25th of March the urine still contained some pus. On the 31st the

patient was sitting up and the wound had closed, and on April 5 she was discharged, feeling quite well.

### *A Very Young Patient*

Case 3. Baby C., aged 8 months. Saw the patient on February 5, 1907, in consultation with Dr. Rowan. Found a large tumor occupying the right half of the abdomen, extending from the ribs to within one-half an inch of Poupart's ligament, and from the right loin to within half an inch of the middle line. It formed a very large prominence, and the abdominal wall was stretched and tense over it. A diagnosis of sarcoma was made and operation advised.

The operation was performed on February 12, at St. Michael's Hospital, and took forty minutes. The anesthetic was chloroform and ether, one in four.

The incision was made through the right linea semilunaris and extended from margin of ribs to within one inch of Poupart's ligament. The abdominal wall being stretched so tightly over the tumor, some difficulty was experienced in getting into the abdomen. The peritoneum was divided to the outer side of the colon and pushed upward from the surface of the kidney, and the latter isolated. When the kidney was lifted forward, the vessels were found running into the upper end of the mass. A ligature was thrown around the vessels here, a clamp applied just above the kidney, and the vessels cut between. A little further down the ureter was divided after throwing a ligature around it. The tumor was then separated from the colon on the inner side and removed. There was practically no hemorrhage.

The abdominal wall was closed with S. W. G. sutures, without drainage. After the operation there were slight evidences of shock but the babe rallied nicely in two hours. She made a splendid recovery and left the hospital in three weeks, apparently quite well. Is still alive, with no evidence of recurrence.

Just a few words about sarcomata of the kidney. These are common up to five years of age, and again from thirty to fifty. Tumors in the infant and adult periods of life not only differ remarkably in structure but arise in different regions of the kidney. Renal sarcomata of infant-life are lodged in the pelvis of the kidney, and those of adult life originate usually in its capsule. Sarcomata of infants originate in the connective tissue of the renal sinus and gradually distend the cortex until the tumor is surrounded by a thin capsule, formed by the expanded secreting tissue of the kidney. On this account these tumors are described as encapsuled, but it is a spurious encapsulation, formed partly by renal tissue and partly by the true capsule of the kidney.

Cavities are due to secondary changes. The base is of connective tissue, some round or oat-shaped cells and others spindle-celled. Renal sarcomata of infants are extrinsic in origin and strictly non-renal. The ureter is rarely obstructed. This freedom of the ureter explains the rarity of hemorrhage and the painlessness, because there is no pressure from accumulated urine.

The tumor-tissue will extend into the renal vein and often into the vena cava. Portions become detached and get into the pulmonary circulation and start secondary deposits. The disease may be bilateral.

### *Nephrectomies on Infants*

In 1893 twenty-one cases of nephrectomies of infants were reported. Of these twelve died as the result of the operation, and in the remainder there was recurrence within the year. Since this date a large number of cases has been reported. In six years the mortality from nephrectomy is fifty percent. Out of the fifty, forty-five died of recurrence in from two months to one year. Of the five remaining, one died in a year and a half, one was alive and well at five years, one was alive three years after, and one lived ten years after.

A method of determining the excretory efficiency of the kidney-substance has been recently described by Wright and Ross.

The principle concerned is that of hemolysis, or the solution of the red blood-corpuscles, by a fluid medium possessing a certain minimum of salt-concentration. The normal, or physiological, ratio of salts in the urine as compared with the salts in the blood-serum is as two to one. That ratio is disturbed in conditions where the renal substance is so seriously affected as to prevent the secretion of a urine of such concentration in salts. So it is that in Bright's disease and other similar conditions the ratio of salts in the urine and serum becomes one to one or less.

This reaction, therefore, would appear to furnish a ready, rapid and easy means of determining whether or not, in a condition of kidney-involvement, one is justified in proceeding to nephrectomy. For, if the combined efforts of the remaining secreting substance of both kidneys be not effectual in carrying out the work demanded by the organism, one is not justified in proceeding to remove one kidney, representing, as it almost always does, a certain modicum of healthy and normally functionating renal tissue and of assistance in the task of elimination.

# HYPODERMIC ANESTHESIA

## A preliminary report, giving the advantages and disadvantages of this form of anesthesia, as observed in the author's practice, with the report of a series of cases

By GUSTAVUS M. BLECH, M. D., Chicago, Illinois

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IN spite of the fact that inhalation-anesthesia has become well-nigh perfect, every anesthesia is a source of great anxiety to every conscientious operator. For no one can tell what is apt to happen, and a death directly due to the anesthetic is an event in one's career as a surgeon that is equalled only by another, sometimes unavoidable, calamity, that of pulmonary embolism causing unexpected and almost instantaneous death.

We have done away, thank heaven, with pouring chloroform over the mask, as is still done with ether in many hospitals. We know that chloroform is a treacherous heart poison that is safe only when not given at all. The writer has been led to this by personal experience. I liked chloroform anesthesia and trained my anesthetists to use the liquid drop by drop, keeping a careful watch on the eyes, pulse and respiration. For many years I had no mishaps whatever, and I gained courage enough to condemn deaths due to chloroform as entirely unnecessary, when at last I became converted by an experience which I am likely not to forget during my life.

I was asked to perform an insignificant operation on a member of my wife's family (curettage for menorrhagia). My assistant gave the anesthetic as carefully as usual. Suddenly I noticed that she ceased breathing. I hastily put the instruments aside. There was neither radial nor carotid pulsation. How I felt can be easier imagined than described. Massage of the heart and artificial respiration failed to revive the patient for what seemed to me in the excitement at least five minutes. It may have been less, but I don't want any such experience again.

This and the experience of others with chloroform has stimulated me to thoroughly investigate the various methods of general anesthesia as practised in the leading European and American clinics.

From what I have seen and studied I have come to the conclusion that the administration of ether by the so-called drop-method comes as near being ideal as any inhalation-

method. To say that it is absolutely safe, however, would be telling an untruth. It is much safer than chloroform, no doubt, but not absolutely safe.

The technic of ether anesthesia by the drop-method is undoubtedly too well known to need detailed description.

My own technic is in brief as follows: Careful preparation of the patient with special investigation of the patient's pulse, respiration and kidney function. Previous to the operation the patient is instructed in "breathing gymnastics." The patient is anesthetized with an ordinary Esmarch inhaler, covered with eight layers of gauze. Ether is administered by allowing the liquid to fall on the mask drop by drop. The patient is told to count from 1 to 100, and then backward, 99, 98, 97, etc. If for one reason or another the patient does not seem to take the ether kindly, a few drops of chloroform are used to "bring him under," when the ether is again resorted to.

The fear that ether affects the kidneys and respiratory organs has been proved groundless by numerous experiments of a reliable character. Nevertheless, I had but recently occasion to witness a scene which was anything but pleasant.

A young woman consulted me for a metrorrhagia due to incomplete abortion, criminally induced. I sent her to the hospital and had her anesthetized by the last-described method. I cureted her and brought away a piece of attached placenta. The uterine cavity was packed with iodoform gauze and the patient was turned over to the nurses for the application of a T-binder. She was lifted on the wheelcart, ready to be taken to her room. I noticed then that she ceased breathing. The pulse, however, was good. Compression of the thorax failed to produce respiration. Artificial respiration, pulling out of the tongue and lowering the head of the table finally restored the respiration, though four minutes elapsed from the time I noticed the "accident" until she breathed spontaneously. And this with ether and about twenty drops of chloroform, and fully seven minutes after the anesthetic had been withheld entirely!

The nausea and thirst following the awakening from a general anesthetic are to many so distressing that we have often wished we could do something for them. How little saline rectal injections, washing out of the mouth and even thymol and similar chemicals accomplish those who have gone through the ordeal of a general anesthesia know best.

It is for these reasons that I often have performed major operations, including intra-abdominal work, by means of local anesthesia (after the methods of Schleich or Hackenbruch). But local anesthesia is at best a makeshift in major surgery, especially when relaxation is wanted. No matter how skilfully we may inject the anesthetic (and we must be careful with the quantity lest we inject too large a dose) pain cannot be entirely avoided. In nervous patients cocaine or similar local anesthetics often fail us entirely.

From the above it can be seen that we still have no ideal anesthetic. I shall waste no time on such preparations as antidolorin *et id omne genus*, for they are less safe than ether and unfit for an important surgical procedure.

An article on anesthesia with hyoscine, morphine and cactin attracted my serious attention and though I was seriously prejudiced against this kind of anesthesia, decided to give it a conscientious trial. I therefore had a vial (No. 2, half strength) sent to the hospital, and after perusing the literature on the subject, instructed the anesthetist, the latter showing a great deal of enthusiasm and promising to keep a careful record of all cases anesthetized with hyoscine, morphine and cactin.

The reason why I was prejudiced against hypodermic anesthesia is to be found in the reported unfavorable results with morphine-scopolamine anesthesia. Another reason that when once a drug for which we have no effective antidote is injected into the circulation, it is difficult to fight any untoward effects.

But whatever drawbacks have been reported about scopolamine, we are assured, cannot be applied to hyoscine, which is

physiologically and chemically not at all identical with scopolamine.

On the other hand, I had ample opportunity to study the value of morphine-scopolamine injections at the Sanct Georg Krankenhaus at Hamburg, Germany, about two years ago. Chief-Surgeon Dr. Wiesinger then assured me that out of several hundred major operations, including all sorts of individuals and conditions, they had never seen a mishap. But it must be remarked that over there they do not push this combination of drugs to the fullest physiologic effect. The patients I saw brought into the "preparation room" were all more or less "drunk." They lay on their stretcher with a sleepy expression on their countenances, almost unaware that they were about to undergo ordeals from which even heroic men would have shrunk in horror. My attention was called by the assistants to the extremely small amounts of chloroform or ether consumed by such patients and to the absence of postoperative nausea and vomiting.

This led me to try hyoscine, morphine and cactin with a feeling of safety, though, as will be seen from the appended case-reports, I "groped" my way carefully at first, the directions accompanying the tablets to the contrary notwithstanding.

At this time I have had too few observations to enable me to make any but the most important clinical deductions. I shall have to watch more cases in a scientific manner before being able to give the profession a scientific study on this important subject. This, therefore, must be looked upon as a preliminary report. We are meanwhile keeping on with our work. The influence of the anesthetic on respiration, circulation and blood-pressure cannot be reported as yet, since we have been unable to pay special attention to these phenomena. With the addition of suitable physiologic appliances to our laboratory graphic reports will be possible.

So far as observed the following are the advantages of hyoscine, morphine and cactin:

1. Dulling of consciousness and lessening of fear of even highly nervous patients.

2. Small quantity of chloroform or ether required to put the patients "completely under."

3. Ability to withhold chloroform as soon as full surgical anesthesia has been reached, though a few drops of chloroform occasionally may be required during a protracted operation.

4. Absolute absence of pain in many operations, even though the patients are awake on the table.

5. In average operations, when only two injections (see case-reports) have been used, the patients are wide awake on leaving the operating room.

6. The absolute absence of nausea, the absence of thirst, the ability to swallow water (some patients complain of a bit of dryness in the mouth), without emesis.

7. The ability in suitable cases to sit up in bed early. This of course is of value as a preventive of hypostatic pneumonia and thromboembolism) and to partake of semisolid nourishment often the very day of the operation.

8. Rapid convalescence.

The disadvantage is the time-element, it requiring from two to three hours to secure the desired effect. In private practice this the only objection is outweighed however by the possibility of dispensing with an anesthetist.

### *Case-Reports*

Case 1. A. G., female, white, American, aged 16, hysterical. Has had a right inguinal hernia of moderate size, "for years." Operation (hospital) May 11, 1907 (modified Bassini). As this was my first experience with hypodermic anesthesia, I ordered a half-size tablet injected at 7 a. m. and another at 8 a. m. I saw the patient at 8:30 and found her a trifle under the influence of the drugs but wide-awake. Pulse 90, respiration 20. I ordered a third half-size dose given at once, and at 9 a. m. the patient was brought into the anesthesia room.

The patient is wide-awake and greatly excited. Chloroform narcosis drop by drop. Patient is told to count. At 62 she became confused and a few seconds later was taken

to the operating room. As soon as the first incision was made the anesthetic was discontinued. The operation proceeded very nicely, the patient raising the lower extremities when I was tying off the neck of the sac. A few drops of chloroform insured perfect quiet. As soon as the external oblique was closed I turned the patient over to the interne, Dr. B. T. Woods, for the closing of the wound, and watched the patient. Pulse 74, respiration 18, deep. The patient awoke when the dressings were being applied and spoke to me before leaving the operating room.

Miss Lenz, the nurse in charge, reports: "Absolutely no nausea; patient given 90 grams of water one hour after her return to her room. Patient bright and happy. Her general condition previous to the operation with the exception of the hysteria, was good. Duration of operation, 27 minutes. Total quantity of chloroform used .7 grams (less than two drams).

Note: The technic in this case was faulty; this girl should have received at least two full-size doses of H-M-C.

Case 2. Mrs. E. G., Russian, age 29, mother of one child, general condition fair. Healed (?) tuberculosis of both lungs (apical). Extremely nervous woman. Catarrhal metroendometritis, bilateral laceration of the cervix, Nabothian follicles. Operation (hospital) May 13, 1907. Dilation and curettage of uterus. Schroeder's amputation of cervix. First full-size dose two hours before operation followed by another an hour later. Wide awake and nervous when taken to the anesthesia room. The rest of the anesthesia proceeds somewhat in the same manner as described in Case 1. The posterior lip gives us much trouble, the tissues being so friable that every suture would tear out no matter how carefully and how deeply the needle was inserted. The operation was finally concluded by resorting to a sort of mattress suture. Duration of operation 43 minutes. Total quantity of chloroform used, 10 grams ($2\frac{1}{2}$ drams).

Note: Considering the unusually long time required the quantity of chloroform used was exceedingly small.

Case 3. H. W., aged 26, *puella publica*, history of repeated attacks of vulvar abscess (gonococcic) and abortions; general condition good. Diagnosis: Abscess of Bartholine gland; metrorrhagia due to retained placenta. Operation (hospital), on May 17, 1907. By some misunderstanding during the temporary absence of the anesthetist the surgical nurse gave the patient a third full-size dose immediately before her being taken to the anesthesia room. This patient, also, was very nervous, too evidently under the influence of the hypodermic. She undoubtedly was addicted to the use of alcoholic stimulants. She went easily under the influence of chloroform, but the anesthetic was not pushed. On the operating table she would try to sit up and talk, but a sharp order to "lie down" invariably would be obeyed. The exsection of the infected gland took about eighteen minutes, while fifteen minutes more were used to curet. The patient slept profoundly for five hours after her return to bed, though we had no trouble in arousing her.

Note: Had I waited another half hour for the effect of the third dose no chloroform at all, presumably, would have been necessary.

Case 4. L. O., female, Norwegian, aged 24. Sustained about a week ago an injury to her foot in a fall, which was treated by a physician for a "sprain." The physical examination and the Röntgenogram showed cuneiform fracture of the os. The fragments which appeared displaced could not be reduced. Operation (hospital) May 15, 1907. Two full doses of H-M-C., injected two and one hour, respectively, ante operation. Patient wide awake. A small quantity of chloroform was administered. The patient was still wide awake. Incision over the fracture, ligation of a branch of the dorsal, and replacement of the fragments and interrupted sutures of the wound were done without the patient having any pain whatever, though wide awake. Uneventful recovery.

Case 5. Malé, age 21, patient of Dr. Jens. Brought to Chicago from Kansas

where he had been treated for pneumonia. No fever; patient somewhat weak. Enlargement in left hypochondrium at time of examination. Diagnosis: Subdiaphragmatic abscess with a possible pyothorax. Operation (hospital) May 17, 1907. Two injections of H-M-C. After the administration of about 8 grams of chloroform the patient was profoundly asleep, enabling abdominal section, exploration of a large abscess-cavity, drainage, etc., without the further use of another drop of chloroform. Rapid convalescence.

Case 6. Miss B., age 22, retroversio uteri, endometritis (metrorrhagia). Operation (hospital) May 21, 1907. Two tablets of H-M-C injected two and one hour before operation. Narcosis started with ether. As patient did not go under quick enough, the ether was replaced by a few drops of chloroform. Duration of operation, 20 minutes. Total ether used, 10 grams. No nausea, vomiting or thirst. Uneventful recovery.

Case 7. Mrs. S., aged 25, American. Was operated upon two years ago by two surgeons of questionable skill at a local hospital, where an ovary was removed by laparotomy. Since then continuous metrorrhagia, which was stopped by the author by local treatment. Pains continue. Patient anemic, general condition fair. Operation (hospital) May 23, 1907. Two injections. Ether narcosis. Dilation and thorough curettage of uterus—11 minutes. Laparotomy. General adhesive peritonitis. Adnexa, omentum, parietal peritoneum, all adherent almost into one mass. The breaking up of adhesions was the most difficult task I had encountered in my surgical career thus far. Excision of the external scar, drainage. Total duration of operation 49 minutes. Total quantity of ether 11 grams, chloroform 6 grams. Uneventful recovery.

Case 8. Croatean woman, aged 35, married fifteen years, sterile. Retroversio uteri, stenosis of uterine canal. Operation (hospital) May 27, 1907. Two injections, the last half an hour before operation. Four grams of chloroform sufficed to put her to sleep, so that the retroposition of the uterus, dilation and curettage could be accomplished without the addition of another drop of chloroform.

I have at my disposal a total of twenty-seven observations at the time of this writing (May 30) but none of the other cases offer anything specially interesting. Further reports will be published from time to time as soon as material and opportunity for interesting observations may present themselves.

In conclusion I wish to say that the claim that ether is not as good as chloroform for those who have been subjected to the influence of hyoscine, morphine and cactin I consider erroneous. There is absolutely no reason why ether can or should not be given. Of course it happens that some patients do not take kindly to ether and that rather large quantities are required to produce surgical anesthesia. In such cases the interruption of the ether administration by 8 to 10 drops of chloroform will produce the desired result, whereupon the ether may be resumed.

The objection that H-M-C cannot be given to small children is valid and cannot be overcome. I would, however, not be afraid to use small doses in elderly people.

I beg to express my appreciation to our anesthetist, George H. Doane, for assistance rendered me in the preparation of the case-reports and for his faithful observation of the patients at the hospital.

## EFFECT OF ERGOT USED IN CONJUNCTION WITH HYOSCINE, MORPHINE AND CACTIN

It becomes quite necessary in inertia of the uterus, in some cases of confinement, to stimulate or whip up the womb, but as ergot or ergotine is apt to run one pain into another and thus causes continuous pain, I never have been much in the habit of using this drug. Still we have encountered a case now and then in which it seems that ergot is the only remedy that will answer the purpose. Lately I have had several such, and I have given ergotin

and at the same time used the new anesthetic, the H-M-C compound, and with happy results. The patient, under this combination, would have a good strong pain, then a nice rest, and then a good pain.

In one case in particular I gave only a half-size dose of H-M-C and the ergot, and it acted nicely. It seems to cut off the continuous pain that ergot produces so that one gets the good, intermittent, strong pain from the ergot and the relaxation from the H-M-C compound.

As I have not noted this in any of the contributions to the literature of this subject I thought perhaps it might be of vital importance to some one in the profession and consequently write this account.

H. Leuchman, M. D.

Higley, Okla.

# ::: SURGICAL THERAPEUTICS :::

## SEVERE BURNS

Shock is sometimes profound in severe burns, amounting to total collapse in some instances. As this is dependent in great part on the intensity of pain, a good plan is to give at once as large a dose of morphine as the patient will bear (children cannot tolerate much morphine)—usually to an adult a half grain hypodermically with one-thirtieth of strychnine; or better still, a tablet of the hyoscine-morphine-cactin anesthetic, and a second one in two hours, if needed. Blankets should be wrapped around the body and the patient speedily removed to a hospital or his home, where artifical heat may be applied if the shock continues. Here the popular remedy, a "good drink of whisky," is indicated, and it may be repeated in half an hour if collapse continues. Digitalin may also be injected a half hour after the morphine. A most popular application, used in nearly all great iron-foundries, is "carron oil," of this composition:

| | |
|---|---|
| Lime water | 125 parts |
| Linseed oil | 125 parts |
| Phenol | 10 parts |

Gauze is saturated with this and applied to the burned surfaces, and changed every twelve hours. In small burns a saturated solution of carbonate of sodium (common washing soda) checks the pain. The best application is 5-percent aqueous solution of picric acid, cloths or gauze being wrung out of it and applied to all the affected surface; but it stains everything a bright yellow, which will not come off. Rubber gloves must therefore be used in handling it.

## ANAL FISSURE

Before resorting to operative measures it is best to give laxatives and to burn thoroughly the fissure with pure carbolic acid. Next day it is well to begin the use of glycerin suppositories containing 5 percent of iodoform. In a few minutes after the introduction of one into the rectum, a free and painless bowel-movement will occur. The suppository may be used every day. An old remedy was a teaspoonful of sulphur at bedtime; and by its mild laxative effect it certainly did much good. It may be combined with powered cinnamon to cover the smell and taste.

## PROLAPSED KIDNEY AND INSANITY

Our hospitals for the insane contain thousands of patients (particularly women) who suffer from wandering kidney. Many of these unfortunates, indeed, might have been saved loss of their equilibrium by timely suspension of the loosened kidneys. This must not be construed as a statement that wandering kidney is a cause of insanity, but simply that the irritation resulting from the dragging of the displaced organ is enough to unbalance an unstable mentality.

This declaration also must not be taken as a mere supposition—it is the result of many years' study. Asylum physicians declare it is not true, because most asylum physicians (chosen by political pull rather than by any fitness for their positions) are not capable of making a diagnosis, save in exceptional cases. It is not improbable that some of these patients might be greatly helped, if not entirely cured, by correction of this source of nerve-irritation.

## POISONING FROM COCAINE

In about one case in ten some symptoms of poisoning will follow the injection of cocaine for surgical purposes. Ordinarily, as known, the patient will merely complain of a little faintness with dilation of pupils. But, rarely—especially when even a 2-per-cent solution has been injected into the tongue—alarming symptoms arise: faintness even to complete syncope, nausea, and vomiting, temporary blindness with excessive mydriasis, coldness and clamminess of the skin with almost impreceptible pulse; even epileptiform convulsions have been reported. But—no death will follow! So the proper treatment is to give the patient a "good drink" of whisky, place him in the recumbent position and go on with the operative work. By the time the operation is finished most of the unpleasant symptoms will have disappeared; and in an hour or so the patient will be as well as ever.

## PAINFUL HEEL

Some patients complain of pain in the heels, most prominent for a little while after getting out of bed. It is often one of the sequels of gonorrheal infection. It may also be due to a calcaneobursitis of traumatic as well as gonococcic origin. In others still there may be a small exostosis of the calcaneum—which also is most frequently due to a gonorrheal infection possibly of many years before. Also it may be due to simple "weak foot" in very heavy patients in which case either strapping or use of a brace to the arch of the foot will relieve. But in most instances the "two-glass test" will show "clap-threads" in the urine; and persistent treatment for the hitherto unsuspected chronic gonorrhea will cure the painful heel and other symptoms usually attributed to "rheumatism" or "gout."

## TUBERCULOUS PERITONITIS

When operation is declined, or is contraindicated, the abdomen may be smeared, twice a day, with this ointment:

Yellow mercuric oxide.. 1.5 (20 grains)
Belladonna ointment ..32. ( 1 ounce)
Lanolin .....32. ( 1 ounce)

This relieves the pain to a remarkable degree, especially with children in whom the skin is sufficiently thin and tender to permit free absorption.

## POSTOPERATIVE PAIN

One of the principal objections to operative treatment, on the part of patients, is the pain which is presumed to follow surgical work. With the wide adoption of hyoscine-morphine anesthesia this will in great measure pass away, because this form of surgical anesthesia gives many hours of perfect comfort after the patient leaves the operation-room. But when ether or chloroform is used there is a period of some hours during which there is often much suffering. The tendency of most surgeons is to use morphine hypodermically freely for this postoperative pain—entirely too freely in many instances. There are cases in which it is demanded; but in abdominal surgery it is objectionable, first, because it increases the tendency to vomit and, second, because it checks the secretions and arrests peristalsis. Of course when there is a wounded intestine (as in appendicitis) and adhesions are desirable, morphine must be given; not so much, however, to arrest pain as to prohibit peristalsis. In other cases the milder and far less objectionable codeine may be used, the rule being to inject one grain (Gm. 0.07) of the phosphate, and repeat it in one, two or three hours as needed to make the patient comfortable. The phosphate is preferable

to the more common sulphate because it is freely soluble. To quiet nervousness an enema of 1 gram (grs. 15) each of bromide of potassium and chloral is far superior to any opiate.

## PROLAPSE OF THE RECTUM

When it is found that protrusion of the rectum is accompanied by a pocket of peritoneum so that excision is highly dangerous, one may resort to ventral fixation of the sigmoid-colopexy, as it has been called. About 75 percent of all cases may thus be cured; and in safe hands there is no mortality. The technic is, briefly, as follows: After proper sterilization of hands, instruments, dressings and field of operation, an incision is made, parallel to and about one inch above Poupart's ligament. The pelvic colon is recognized and drawn up until the prolapsed rectum is reduced and the anus resembles a funnel-like depression. The lowermost portion is chosen as the point of fixation to the abdominal wall. An oval piece of the parietal peritoneum is removed in the iliac fossa and the colon is sutured to the two edges of the peritoneum by 30-day chromicized catgut suture. At the lower portion of the external margin, the superficial muscle fibers, iliac fascia and the peritoneum are united to the colon, the inner suture attaching the colon along its mesenteric border. The abdominal wound is closed with drainage.

## AIR EMBOLISM

This complication of surgical work is most liable to occur from operations in the axilla when the axillary vein is wounded, about the base of the neck when the internal jugular vein is cut or torn, or when the skull is opened in such way as to open one of the cerebral sinuses; especially is it apt to occur when the veins are put on the stretch or general anesthesia is not employed. The accident is marked by a hissing noise and the bubbling of air in the wound. There is sudden heart-failure, with a "churning" systolic sound in the heart, irregular respiration and dilated pupils. Convulsions may precede the fatal issue. The first indication is to fill the wound with water or blood by a squeeze of a sponge, then compress the vein with fingers and clamp with forceps. As soon as this is done the surgeon must resort to artificial respiration, lower the head and give strychnine and atropine.

## FOR SWEATING FEET

The following formula is an excellent one for sweating of the feet:

| | |
|---|---|
| Potassium permanganate | 13 parts |
| Alum | 1 part |
| Talc | 50 parts |
| Zinc oxide | 18 parts |
| Calcium hydrate | 18 parts |

Another formula highly recommended is:

| | |
|---|---|
| Salicylic acid | 2 parts |
| Zinc stearate | 1 part |
| Talc | 40 parts |
| Compound tincture of vanilla | q. s. |

The last-named ingredient is simply to cover the odor.

## DIABETIC GANGRENE

Encouraging results are sometimes obtained in this usually incurable condition through the administration of nuclein. Locally mild antiseptic applications are indicated. If amputation is to be advised, it must be early and far above the site of local lesion; it may be made under a single dose of the morphine-hyoscine-cactin anesthetic, plus cocaine locally.

## POSITION AFTER OPERATIONS

When the patient is first returned to bed after operation it is usually best to put him on his back; and if there has been great loss of blood or if shock is profound to leave his head without a pillow. But as soon as consciousness returns the pillow may be allowed. And after a few hours the position may be changed from the back to the side if the patient so desires. On the second day, unless there is some particular reason why it should not be permitted, the patient may

be allowed to assume whatever position is most comfortable. After operation for appendicitis, with drainage, the patient should be encouraged to lie upon the right side as much of the time as possible. When it is expected that infected serum will accumulate it is well to have the patient put in the "Fowler position"—the reverse of the Trendelenburg, the head of the bed being raised upon a chair. This is particularly advantageous for the first forty-eight hours after a vaginal hysterectomy or any other operation in which drainage is instituted through the vagina or the perineum.

### BOCKHART'S "BLOOD-SERUM MERCURY"

Another method of preparing mercury so it may be injected beneath the skin is that of Bockhart:

Dissolve 3 grams (45 grains) of bichloride of mercury in 32 grams (1 ounce) of boiling water; dissolve 7 grams (105 grains) of chloride of sodium in 20 grams (5 drams) of water; mix the mercuric solution with 42 grams (10 1-2 drams) of blood-serum sterilized by Koch's method and dissolve the precipitate by adding the salt solution. This makes a 3-percent blood-serum mercury. Add distilled water enough to make 212 cubic centimeters (6 ounces and 5 drams)—i. e., double the amount of fluid, so as to reduce to a 1.5 percent solution, which is practically unirritating. Of this 15 drops may be injected once daily, which is equal to gr. 1-4 of the mercury compound.

### SODIUM OLEATE FOR GALLSTONES

A preparation now widely used for jaundice is oleate of sodium. It is used principally for catarrhal jaundice but is also capable of improving jaundice due to obstruction by gallstones if it be given just after the attack of colic has subsided. It is said to reduce the frequency of attacks in those subject to frequent but not very severe spells.

## GYNECOLOGICAL THERAPEUTICS

### DANGERS OF OPERATION FOR FIBROIDS

Many doctors hesitate about advising hysterectomy (or myomectomy) on account of misapprehension of the dangers. The truth is that in careful hands removal of uncomplicated fibroid tumor of the uterus is one of the safest of abdominal operations. Death occurs only (1) in cases allowed to progress so far that pressure-symptoms have arisen, adhesions have formed or degeneration of the tumor has begun, or (2) in cases subjected to operation at the hands of surgeons not thoroughly familiar with the correct technic. Indeed, so safe has the operation become that the most conscientious, ultra-conservative gynecologists are now recognizing the fact that a fibroid tumor is of greater danger than is operation and are urging removal of tumors which do not give rise to any symptoms whatsoever. Fibroid tumors associated with pregnancy should, when possible, be left until the period of gestation is complete and then removed—cesarean section being made to save the child.

### WHY INVALIDISM AFTER CHILDBIRTH?

An enormous number of women make the same complaint: perfect health up to delivery of the first child and then invalidism, more or less complete. Why should this be so? Theoretically, it should not, but—facts cannot be denied, it is so. One of the chief causes of trouble is infection, soon after delivery, by gonorrhea: the husband having become infected during the last few weeks of pregnancy. Another important element is unclean delivery: the doctor (or midwife) is careless about cleaning the hands and finger-nails, and especially about cleans-

ing the vulva; and a mild type of fever results, generally called "milk-fever," not enough to cause anxiety on the part of the attendant, but just enough to cause subinvolution and its consequent discomfort. Probably the most frequent cause of invalidism is failure on the part of the doctor to sew up the laceration of the perineum, which seems of too trifling degree to cause trouble; though worse than leaving it open is an attempt to repair it without proper attention to surgical cleanliness. Almost of equal importance is improper perineorrhaphy, i. e., sewing the skin and leaving the muscle and mucous membrane to heal by granulation—or not at all.

## DISSECTING PUERPERAL METRITIS

There is a form of acute inflammation of the uterus, dependent upon infection at childbirth, which is so peculiar in its character as to be called "dissecting" puerperal metritis. As a result of severe, acute infection of the muscular tissues of the uterus there is a necrosis of the deeper layers of the uterine wall, the dead tissues being cast off in a continuous sheet, or "membrane," having the form of the interior of the organ. The first symptom after delivery is a sharp fever, with pelvic pain, and examination shows enlargement of the uterus, with thickening of its walls; and day by day the enlargement becomes more pronounced. There is not, however, the marked abdominal distension which is found in acute pelvic peritonitis, nor does the pulse become so weak, though it is very rapid. There is a decidedly "dead" smell to the lochia, with great tenderness in the uterus, which is flabby. If the case runs an uninterrupted course, in about four weeks there is expulsion of the gangrenous "cast," but even then recovery may not follow. The mortality is 75 percent. When the patient does live, sterility is probable—not from closure of the fimbriated extremity of the fallopian tubes (as in gonorrheal metritis) but from destruction and exfoliation of the uterine mucous membrane. Besides sterility as a sequel there may be hematometra and hematosalpinx from cicatricial stenosis of the lumen of the cervical canal. When recognizable, the proper treatment is through curetment, burning the affected surfaces with pure carbolic acid, neutralizing excess of acid by swabbing with pure alcohol and then packing the uterus loosely with iodoform gauze. The packing is to be removed on the third day and the uterus irrigated with 3-percent phenol solution.

## CAUSES OF DYSMENORRHEA

Dysmenorrhea is very common—at least 45 percent of all women questioned will be found to suffer decidedly at the menstrual period. Of dysmenorrheics fully 25 percent will be found, on careful examination, to be affected by some definite pathological condition in the pelvis; another 25 percent will show pelvic disease which ought not, theoretically, to produce painful menstruation. The conditions most prominently associated with dysmenorrhea are stenosis of the cervix, pelvic inflammations (notably gonorrheal closure of the fallopian tubes, retrodisplacements, endometritis and uterine tumors, especially myomata. Benefit can be derived chiefly from correction of the cause of the trouble.

## VAGINAL TAMPONS

Best results from vaginal tampons are to be obtained when they are prepared and used according to the directions of Byron Robinson, as follows: (1) The composition of the vaginal tampon consists of a roll of medicated cotton (hen's-egg size) tied to a twelve-inch string, placed in a solution of sixteen ounces of glycerin and two ounces of boric acid. (2) The duration of preparation of vaginal tampon should be to lie in the boroglyceride solution forty-eight hours before using. (3) The utility of the vaginal tampon is: (a) it is hygroscopic; (b) it serves as a mechanical support; (c) it contracts tissue (muscle, elastic and connective); (d) it contracts vessels (lymphatic, vein and artery); (e) it hastens absorption of exudates; (f) it checks secretions; (g) it stimulates; (h) it curtails inflammation; (i) it drains the

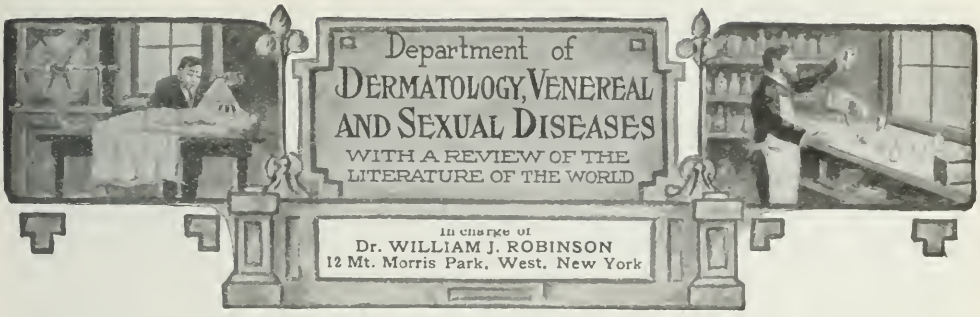
pelvic organs; (j) it cleanses; (k) it dissolves mucus, pus and leucocytes. The utility of a vaginal tampon depends upon its composition, the quantity employed, the duration of its application, and on particular method of use. (4) The methods of introduction consist in placing three to five vaginal tampons (with, or better without, the aid of a speculum) in the vaginal fornices in the direction of least resistance. (5) Disinfectants in a vaginal tampon is secondary to its other qualities, especially that of hygroscopy. (6) The object to accomplish by a vaginal tampon is: maximum hygroscopy, dissolving the elements in the discharge as mucus, pus, leucocytes, the mechanical removal of morbid secretions, accumulations and foreign bodies, diagnosis, mechanical support. (7) The diagnosis is aided by the use of a tampon by collecting and preserving the uterine discharge (as pus, blood and debris). (8) The requirements of a vaginal tampon are: (a) it should be non-irritating; (b) it should possess hygroscopic power; (c) it should be a solvent of discharges (mucus, pus, leucocytes, blood); (d) it should aid in the dissolving of the mechanical removal of morbid secretions, accumulations and foreign bodies; (e) it should be aseptic (not necessarily antiseptic); (f) it should not indelibly stain the clothing (this is an objection to the use of ichthyol); (h) it should be reasonably economical. (9) The frequency of application of the boroglyceride vaginal tampon should be, in general, twice weekly; more frequent employment may cause irritation. (10) The time to apply the tampon is at night during maximum anatomic and physiologic rest. (11) The duration the tampon may usefully remain in position is ten to twenty-four hours. (12) There are no special contraindications to the application of the vaginal tampon in pelvic disease. (13) The boroglyceride vaginal tampon may be beneficially applied in: (a) inflammatory pelvic disease (vaginitis, endometritis, myometritis, endosalpingitis, myosalpingitis, pelvic peritonitis, proctitis, cystitis); (b) sacropubic hernia (a support for the uterus, cystocele and rectocele); (c) in genital ptosis, where it depletes the lymphatics and veins. (14) A vaginal tampon applied according to the above directions will prove to be of therapeutic value, in the treatment of pelvic disease, a prophylactic agent, and a comfort to the patient.

## GANGRENE OF VULVA AND VAGINA

As a complication of typhoid fever gangrene of the vulva or vagina may result from (a) want of attention to the parts which are constantly soiled by the urine and feces and sometimes by menstrual blood, or (b) thrombosis of the vessels, the typhoid bacilli being likely to cause thrombi in various parts of the body. It may appear as either (a) an extreme area of gangrene upon one labium or upon the vaginal wall, or (b) by gangrenous ulcers in the vagina. The gangrene may be so extensive that in healing by granulation complete closure of the vagina (atresia) occurs, with subsequent retention of menstrual blood. Or the cervix and entire vagina may slough away—usually with a fatal ending. Ulcers in the vagina, due to this cause, are most often found upon the posterior wall and by deep necrosis of tissue may lead to vaginorectal fistula. Vesicovaginal fistula dependent upon typhoid gangrene has also been reported. The gangrene also may attack the perineum near the anus; most often by extension of the necrotic process from the vulva. It may result either in vaginal or anal fistula. Perineal fistula has also been reported from typhoidal necrosis of the pelvic bones or sacrum. *Treatment*: As soon as discovered, the parts should be cleaned as perfectly as possible and the affected areas burned by a Paquelin cautery, followed by an antiseptic dressing which must be changed as often as necessary to keep the parts clean. Internally the patient must be given strychnine vigorously, digitalin and sparteine also being indicated. Forced feeding to the limit of safety is imperative.

## OSTEOMALACIA

This disease has been temporarily greatly relieved by ovarian transplantation. But in every case thus far reported there has been a speedy change for the worse.




# AFTER-TREATMENT OF INTERNAL URETHROTOMY

Reasons for the limitation and neglect of this useful operation, with the suggestion of methods of preventing the complications and sequels which have made it unpopular

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WITH the advent of the Kollmann dilator and the irrigation treatment of gonorrhea, the operation of internal urethrotomy was by a large proportion of the profession relegated to the background. While, so far as I am aware, I was the first to employ systematic irrigation treatment for urethral inflammations and infections, I have never been able to convince myself that the urethrotome was not a valuable addition to the *armamentarium chirurgicum*. On the contrary, it is my firm belief that many uncured cases of gleet are at the present time due to ignorance of the value and technic of the Otis operation.

I will take occasion to reiterate here a statement that I have often made in my published writings and lectures, to the effect that it is not the presence of a urethral contraction alone that determines its importance. It is the possible or probable relation of the aforesaid coarctation to the urethral discharge or to persistent posterior urethral or bladder-infection that counts. It is this relation, moreover, that determines the advisability of an operation. I will also reiterate my frequently expressed opinion that the end and aim of internal urethrotomy is to secure rest and drainage of the urethral canal.

### *Too much Expected of this Operation*

It has occurred to me that one of the reasons for the limitation of the usefulness of internal urethrotomy is that too much has been expected of it. More has been demanded of the Otis operation than any sensible surgeon should ask of any operation. Infallibility and absolute freedom from complications or disagreeable sequelæ are practically what the surgeon has been asked to guarantee in this particular field. An occasional deformity following operation—whether said deformity be temporary or permanent, or an occasional uncured gleet—have been accepted in many quarters as absolute proof of the danger and inefficacy of an operation which is not only very effective in the majority of properly selected cases but exceedingly safe. An all-sufficient explanation for a large proportion of failures and disagreeable results is faulty postoperative management.

Profuse and long-continued hemorrhage is not an infrequent source of danger in internal urethrotomy. Where the blade of the urethrotome does not deviate to any

extent from the median line of the urethral roof, hemorrhage is not usually severe, unless a very wide blade is used. Should the hemorrhage be profuse and annoying, the injection of adrenalin solution frequently is efficacious. The application of an ice bag immediately after the operation usually works well. Should adrenalin and the ice bag fail to control hemorrhage, the application of a firm bandage beginning anteriorly at the extremity of the glans will check any hemorrhage that is not located deeper than the penile urethra. Where the incision involves the perineal portion of the urethra in internal urethrotomy, and severe hemorrhage occurs, the safest plan is to open the urethra in the perineum, pass a large drainage catheter into the bladder, and pack the anterior urethra down to the perineal drain with iodoform gauze.

*Turpentine Useful for Persistent Oozing*

Persistent urethral oozing may very often be controlled by the internal administration of ten- to fifteen-minim doses of oil of turpentine every three hours. Nearly thirty years' experience with this drug has convinced me beyond peradventure of doubt of its value in hemorrhages of the urinary way. There is no other remedy, in my opinion, which is in any way comparable with it.

The best prophylactic against hemorrhage is complete rest in bed for four or five days following the operation. The custom of performing internal urethrotomies in the surgeon's office and allowing the patient to go about is decidedly unsafe, although there are, to be sure, occasions when, for one reason or another, this cannot be avoided. In such cases, however, the patient should be warned of the danger, and to be on his guard against severe bleeding.

Occasional cases are met with in which hemorrhage occurs several weeks after operation. Aside from impressing upon the patient the necessity of quiet and sexual rest, there is no way of guarding against these rare accidents. In more than a quarter of a century's experience I have never encountered a case of fatal hemorrhage in my own practice.

*Don't Pass Sounds too Often*

The most common fault in the after-care of urethrotomy is the frequent passage of sounds. It is my custom to allow four or five days to elapse before the passage of any instrument into the urethra. Sounds are subsequently passed at intervals of from four or five days to a week. To pass sounds more frequently than this as a matter of routine is inadvisable.

When the sounds require force for their passage, it is evident that the stricture-tissue has not been completely divided. When the operation has been properly done, an instrument of the proper size, i. e., the size adapted to the individual case, should pass without resistance.

There is a question in my mind as to whether the passage of sounds even so infrequently as every fourth or fifth day is really necessary. I have met with cases in which, on account of the neglect of the patient, sounds were not passed for several weeks after an internal urethrotomy, and still the result was perfect.

The intervals between instrumentations should be increased at the end of a couple of weeks, and the sounds passed once in a week or ten days for a month longer.

*Vesical Antisepsis Will Prevent Urinary Chill*

If the patient be given urotropin or eucalyptus and salol before and after operation, urinary chill or fever following urethrotomy or the subsequent use of sounds will be found to be very rare.

In passing, I desire to state that for some years chill or fever following the passage of instruments has been very rare in my experience. Aside from modern antiseptic precautions, I am convinced that one of the reasons why I meet but few cases of disagreeable results from urethral manipulations is the thorough division of all stricture bands by urethrotomies and the fact that I avoid forcing of sounds into the urethra.

When a sound of moderate size does not enter easily after a urethrotomy, either internal or external, I conclude that I have not divided the stricture thoroughly and have left some stricture-bands behind. It is my custom under these circumstances to reoperate. I have learned by experience that the hope of dilation of any resisting tissues that remain after the operation is elusive.

*Deformities Following Internal Urethrotomy*

Curvature of the penis following internal urethrotomy very frequently occurs. In nearly all cases, however, the deformity is a simple chordee and merely temporary, and depends entirely upon inflammatory exudate into the meshes of the corpus spongiosum and the interfascial planes involved in the incision. When the incision deviates from the median line, curvature is especially apt to result. I have never met in my experience with a case in which I could be at all certain that permanent deformity of a degree sufficient to produce any annoyance other than psychic had resulted. I have, however, met with cases in which the curvature lasted for a long time and in several of these the patient was lost sight of, so that permanent deformity possibly resulted. It is nothing unusual for the patient to report a year or more after the operation, and state that the deformity, which was considerable, has entirely disappeared. I recall the case of a physician upon whom I operated, who claims that permanent deformity resulted. He, however, has since married and states that there is now no functional disturbance of any kind, hence I infer that the permanent curvature must be very slight.

I believe that the frequent introduction of large sounds after the operation of urethrotomy has more to do with producing curvature than has the operation *per se*. I have had the least trouble in those cases where the patient was sounded infrequently. Faradism and massage constitute the most reliable means for the relief of curvature where this condition is slow in yielding. Very rarely, however, is it necessary to resort to any treatment. Nature's unaided efforts usually are sufficient.

The duration of systematic sounding after internal urethrotomy of necessity varies. I seriously doubt the necessity of sounding longer than two weeks after the operation, but, preferring to remain upon the safe side, my custom is to introduce sounds at gradually increasing intervals for a month or six weeks.

## THE CONSTITUTIONAL TREATMENT OF GONORRHEA

Dr. Charles Leedham-Green, surgeon to the Queen's Hospital of Birmingham, states (*Folia Therapeutica*, July, 1907,) that it is a sound axiom in dealing with gonorrhea that the acute onset of a complication should be regarded as an indication for immediate suspension of all local measures. The treatment for the time being should be purely constitutional. Thus, whenever the patient begins to complain of a constant desire to micturate, of a feeling of weight and uneasiness about the rectum, of pain and swelling of the testicle, or of any other symptom which suggests the extension of the inflammation to the posterior portion of the urethra, prostate, or bladder, the local treatment should at once be suspended.

Again, where the complication is not merely the extension of the inflammation by continuity of tissue, but is the result of the gonococci escaping into the general circulation, giving rise to a form of septicemia and metastatic deposits (recognized clinically as rheumatism, arthritis, peritonitis, endocarditis, etc.), the local treatment of the urinary urethral trouble should be discontinued until the complication has passed its acute stage.

The advisability of so acting is not, unfortunately, so well recognized by the profession as it deserves to be. Not infrequently the practician, priding himself on having "spotted" the fact that the acute synovitis or endocarditis from which his patient is suffering is secondary to a

urethritis, follows up his diagnosis with an energetic local treatment of the urethra; but often with dire results to the patient.

A short time ago Dr. Leedham-Green saw a gentleman, in consultation, who was lying seriously ill with very acute synovitis of the knee and ankle, which had developed some three or four weeks after he had contracted gonorrhea. When seen he was in an alarming condition, for the temperature was ranging between 102° and 104°F., severe rigors were becoming increasingly frequent, and a slight delirium at night had set in.

At the onset of the synovitis the patient was not under treatment. But his doctor, recognizing the true state of the case, at once instituted and superintended a careful and thorough urethral irrigation; and, as the joint trouble and the constitutional symptoms became worse, the more persistently were the local measures applied to the urethra, until a condition of grave septicemia supervened. Happily, the cessation of the urethral irrigation immediately brought about an improvement. From that time onward no further rigors were experienced and both joint and constitutional symptoms rapidly subsided.

The number of internal remedies which have been advocated from time to time for the relief of this disease is truly legion; but it would serve little purpose to review them. The majority are no longer regarded as having any claim to consideration. Indeed, the number of remedies which have stood the test of time is remarkably small. It includes certain of the balsams, the empirical value of which has long been known, though their mode of action is not quite clear; and a number of drugs which when given by the mouth are split up in the metabolism of the body and excreted by the kidneys as urinary antiseptics. The chief of these is salicylic acid and its derivatives.

So long as gonorrhea is confined to the anterior portion of the urethra there can be no question that, of all the drugs at present known, one or other of the balsams is the most suitable. Many of these may be given with advantage, but the best of all is sandalwood oil. It is as efficacious as any other, and is the least likely to give rise to gastric or renal disturbance. It is therefore generally the best drug with which to start the treatment. Its effect however must be closely watched; for, though as a rule it is well tolerated and beneficial, yet this is by no means always the case. It may give rise to serious disturbance, or it may prove to have no beneficial influence on the disease whatever. In either case a change of drug is indicated.

Recently Dr. Green has been using a combination of sandalwood oil and salicylic acid (known as "santyl") for these cases of acute urethritis, with sensitive or inflamed kidneys; and so far he has obtained the happiest results. It seems to be little, if at all, inferior to pure sandalwood oil as an antigonorrheal agent; it is singularly unirritating to the kidneys.

Apart from the question of intolerance, the other indication for a change in the treatment is the absence of any apparent beneficial effect. Such a statement is so obvious that it would be ridiculous to set it down, were it not for the frequency with which one meets with patients who for months have been taking one or other of the accredited gonorrheal drugs, without the slightest benefit ever having been noticed. If in acute gonorrhea a decided improvement in the patient's condition is not noticed within a few days from the first dose of the selected drug the necessity for a change is indicated. As a rule sandalwood oil is the most efficient of these remedies, in the acute stage. It frequently happens however that one of the other balsams seems to suit a particular case far better.

At the first suspicion that an acute gonorrhea is spreading to the posterior urethra (i. e., the portion of the urethra which lies behind the compressor urethræ muscle), an alteration of the treatment is advisable. Hence the importance of frequently examining the urine in these cases.

The salicylates, though of comparatively little value in inflammation of the anterior

urethra, exert a very beneficial action in posterior urethritis. Under their influence the urine rapidly clears and the acute distressing symptoms disappear. These drugs have the great advantage of rendering the urine markedly acid—a point of considerable importance—for by maintaining the acidity of the urine we use our strongest prophylactic against the urethral inflammation extending to the bladder, and so producing cystitis. The desirability of maintaining the acidity of the urine must also be borne in mind when dieting the patient. A light milk diet, with the substitution of mineral waters for alcoholic drinks, as is so often recommended, causes a decided and undesirable reduction in the acidity of the urine.

## DERMATOLOGIC MAXIMS

The following dermatologic maxims by Dr. N. E. Aronstam are useful to bear in mind:

1. Calomel, sodium salicylate and small doses of the extract or tincture of belladonna will benefit the most intractable cases of urticaria, even after all other remedies, both internal and external, have failed to effect a cure.

2. In acute erythematous eczema of the extremities, where the subjective symptoms are very pronounced and annoying, the application of a dilute solution of the adrenal principle to the lesions will produce a rapid blanching of the parts and ameliorate the intolerable itching. After the acute features of this dermatosis have subsided an ordinary Lassar paste, with or without ichthyol, wherein a small amount of adrenalin solution has been incorporated, will hasten the restitution of the involved areas to their normal.

3. Baker's yeast is occasionally of signal service in furuncles, administered in half-dram doses three hours after meals, just at the time when the food has undergone chylification in the small intestines. This is especially indicated when indican is detected in the urine of patients afflicted with repeated outbreaks of this affection.

4. The little chamois-yellow papules and macules on the lower lids at the canthi and sometimes on the dorsal surfaces of the hands and forearms are xanthematous in nature, and indicate either renal lesions or affections of the pancreas and liver. They have also been met with in patients suffering from glycosuria. An examination of the urine of all such patients is therefore imperative.

5. Potassium iodide may at times produce an angioneurotic edema of the eyes and face. This furnishes a serious drawback for its exhibition in syphilis. It can, however, be avoided by combining it with tincture of belladonna or hyoscyamus; the latter drugs will act as a corrective of this untoward action of the iodide and thus obviate the appearance of these lesions.

6. Remember that pickles, porridge, pork, pastry and potatoes must be excluded from the dietary of patients suffering from cutaneous diseases. This dictum could readily be formulated by stating that all articles of diet beginning with a "p" should be tabooed from the table.

7. Fatty applications are as a rule not well borne by the scalp or any hairy part of the body. When such a selection, however, has been made, the hair must be clipped short or else, especially in girls, where the cutting of the hair is absolutely refused, we must have recourse to lotions, preferably aqueous or alcoholic, which invariably act more favorably than unctuous preparations.

8. Never use aqueous lotions in acute vesicular or erythematous eczema, for water will nearly always irritate the lesions and intensify the pathologic process. Protection is the indication, and pastes or powders are very useful in such cases.

## THE TREATMENT OF ACUTE AND CHRONIC CYSTITIS

Dr. Ehrmann states (*Med. Review of Reviews*) that cystitis being an inflammation of the vesical mucosa caused by microbes which enter either through the urethra, the ureters by way of the neighboring

organs or through tissue solutions and the general circulation, it is evident the treatment must be primarily directed toward the control of the inflammatory agents. However, it is possible in rare cases only to proceed by the direct introduction of antiseptic remedies into the bladder. In gonorrheal cystitis, and in the presence of a copious discharge, no instrument should be introduced, and no injection administered, before the urethra has been cleansed from pus. The actual treatment, besides rest in bed, should be symptomatic as well as etiologic. The direct introduction of the customary antigonorrheal remedies into the bladder, in the presence of acute cystitis, has been shown by experience to aggravate the inflammation, without materially harming the gonococci. This indicates the administration of those remedies which experience has shown to possess an antiseptic action upon the microbes in the bladder, through the excretion of the medicinal agent or its by-products in the urine. In the writer's experience, which is presumably shared by the majority of specialists, the salicylic acid preparations render excellent services in this connection.

In the more chronic forms of the disease the balsams are advisable, such as oleum santali, in combination with salicylic preparations (santyl), or with kawa balsam (gonosan), also oil of turpentine, all of which remedies have a disinfecting action upon the contents of the bladder, in the course of their excretion in the urine. Urotropin, which causes the excretion of formaldehyde in the urine, was found less efficient by the author in pure gonorrheal cystitis than in cases of acute cystitis due to mixed infection with the various forms of the colon bacillus, as well as cases of pure colonic cystitis. The remedy is given three times daily, in doses of 7 1-2 to 15 grains, or six times daily, in doses of 7 1-2 grains, preferably in ordinary or mineral water. Citarin and helmitol have a similar effect.

Special medication for the strangury, pain and hematuria of acute cystitis is rarely required. Should it be desirable, the old familiar decoctions of uva ursi, or the herba herniariæ recommended by H. V. Zeissl, and the herba chenopodii ambrosioides may be employed several times in the course of the day, in shape of tea, preferably all three mixed together. In addition to their diuretic effect, it would seem as if they caused a favorable influence by certain bodies which pass into the infusion, notably arbutin. [Why not use arbutin instead? Then we know just how much we are giving and we can increase or diminish the dose intelligently.—W. J. R.]

The irritability of the vesical mucosa is advantageously treated by the use of narcotics, rectal application being preferred by the author because small doses will thus prove sufficient. He has a predilection for morphine suppositories (1-6 grain) but also employs extract of cannabis indica. In cases with an excessive vascular dilation—where the hemorrhages persist, together with the strangury, as is usually observed—ergot may be advantageously administered in form of suppositories, 15 grains of the extract divided into five suppositories, two or three to be used in the course of the day.

Local treatment may be adopted as soon as the irritative phenomena have subsided, keeping in mind the fact that gonorrheal cystitis is almost invariably combined with posterior urethritis. Bland vesical injections are useful at first, such as a 2- to 3-per cent solution of boric acid, lukewarm, by means of a soft Nelaton catheter, if feasible. At the beginning of the local treatment very small amounts only (about 6 drams) should be introduced, the bladder not being quite empty at the time of the injection, in order to avoid vesical contractions. The procedure must be repeated until the rinsing fluid returns perfectly clear. A portion of the fluid, about 2 to 4 drams, is then left in the bladder, and may be spontaneously voided after ten or fifteen minutes. Boric acid being a very weak antiseptic, its employment should be combined with the internal administration of salol or the balsams.

Stronger disinfectants, for use after the bladder will tolerate 1 1-2 ounces or more

of the bland fluids, are silver nitrate (0.25 to 1:1000), salicylic acid (1:200), resorcin (3:100), quinine sulphate (0.5:400). An attempt may be made to get along with potassium permanganate, with the assistance of a catheter, or Janet's method of injection by way of the urethral orifice; the latter being less suitable for the acute and subacute forms than for chronic cases. The injection of silver salts, especially silver nitrate, must be preceded by rinsing with lukewarm sterilized water or boric-acid solution. Physiological salt solution may be employed in cases with much mucous formation, especially before the use of strong silver solutions. At first, and before the reaction of the bladder toward the silver nitrate is known, it will be advisable to refrain from simultaneous treatment of the posterior urethra, and to inject only into the vesical cavity, using 6 drams of the weakest solution, 0.25 per 1000 [4 grains to a quart] which are allowed to remain for a few seconds and then evacuated through the catheter. Pain occurring at the time of more concentrated injections is readily controlled by the introduction of a sterile physiological salt solution (0.8:100), which should be kept in readiness.

The treatment of cystitis, not referable to the gonococcus, is based on the same principles as the treatment of gonorrheal cystitis. Among the internal remedies, urotropin is apt to prove very useful, especially in the presence of ammoniacal urine, in the cystitis associated with strictures and prostatic hypertrophy. When the urine is very acid, lime water is advantageously given three times daily, mixed with milk in equal parts (about oz. 1 in a glass of milk). Alkaline waters, salicylates, benzoic acid, and methylene blue (1 1-2 to 7 1-2 grains per dose [7 1-2 grains of methylene-blue is in our opinion a decidedly too large dose; we never exceed 3 grains. W. J. R.], 15 grains daily in wafers or capsules) are likewise indicated. The patient is not put upon an exclusive milk diet by the author, who permits small quantities of easily digested meats, green vegetables, fruit juices, light puddings, etc. The partaking of much food at one meal should be avoided, however. In chronic cystitis, the internal disinfectants are of little value, with the exception of urotropin, which has an excellent effect in cases of chronic cystitis of prostatic patients, of non-gonorrheal cystitis in the female, and of non-purulent bacteriuria, due to the bactericidal action of its by-products. The alkaline or neutral urine promptly becomes acid by the use of urotropin, and clears up, under disappearance of the bacteria.

Chronic vesical catarrh requires more frequent and regular local treatment than the acute form. Silver nitrate again takes first rank among the remedies in use. The concentration of the solutions may be similar to that employed in acute cystitis, with a higher general average. Astringent remedies are likewise indicated in chronic cystitis, especially in the hypertrophic forms, such as zinc sulphate or sulphocarbolate (0.5 to 1 per cent.) or alum (0.5 per cent.). Janet's flushings with potassium permanganate, without the assistance of the catheter, are likewise found serviceable in cases of chronic cystitis (solutions of 0.5 to 1:1000). The procedure may be repeated until 1,000-2,000 Cc. [1 to 2 quarts] of the solution has successively passed through the bladder.

In tuberculous cystitis the injection of iodoform emulsion has been recommended (iodoform, 50.0; glycerin, 40.0; distilled water, 10; gum tragacanth, 0.25. Half a tablespoonful of this mixture, in 500 grams of water, for vesical flushing). If the inflammation of the mucous membrane has been demonstrated to be merely local, by means of the cystoscope, small quantities of a concentrated silver-nitrate solution may be injected with a Guyon syringe, after the bladder has been flushed and the last drop of the rinsing fluid has returned. Solutions of 1:500 up to 5 per cent. may be very carefully injected by means of this instrument. As a rule, only a few drops are injected, Surgical interference, curettage and cauterization of the bladder can be performed only after cystoscopic examination, preferably with the assistance of the operation-cystoscope.

In the male the bladder will sometimes have to be opened, in order to relieve the painful contractions, especially in vesical tuberculosis. Very obstinate cases of suppurative cystitis of a different character (abscesses) occasionally require similar treatment for evacuation of the pus.

Contracted bladder, subsequent to chronic catarrh, requires systematic stretching, which may be begun only after all inflammatory phenomena have subsided. Favorable results are to be anticipated in youthful individuals only. The stretching is accomplished by the injection of fluids, preferably boric acid solution, until the physician feels that the internal pressure requires increased muscular effort to be surmounted. All and any rise of pressure must be stopped at this instant, the fluid being now withdrawn and measured. This may be repeated every third day.

Febrile phenomena are observed especially in colonic cystitis and in infection with the Hauser proteus. One of the most important points in the treatment of this intermittent fever is the regular evacuation of the bowels. The bladder should be carefully flushed, together with the internal administration of salol, sodium salicylate, or aspirin. Urinary infiltration, or abscesses in the tissue, should be looked for in the vicinity of the bladder. In case this condition is found to be present, a permanent catheter must be introduced at once, to be changed every day, and combined with it at least two flushings of the bladder, in order to guard against further urinary infiltration. If the fever does not subside, very deep incisions must soon be made in case of urinary infiltration. In female children a complicating vulvovaginitis must be carefully treated. Tuberculous febrile cystitis is managed by Guyon with flushing by means of his drop-syringe, using a solution of mercuric bichloride, 1:3,000.

## TREATMENT OF ACNE

Dr. Josef Kapp (*Therap. Monatsh.*, Mar., 1907) suggests that the tendency to acne at about the time of puberty may be of intestinal origin, and in 94.9 percent of a series of 33 cases of acne occurring at this age he has found clear evidence of abnormal putrefactive changes in the intestine, as shown by the presence of an excess of indican, phenol, cresol, etc., in the urine. This intestinal putrefaction he considers may be due to the peristaltic inertia common at about the time of puberty.

Although further investigations are needed to demonstrate the causal connection between acne and excessive intestinal putrefaction, the author has, on the strength of his observations, tried the effect of drugs in cases of acne which have an antifermentative action and which aid peristalsis, and with this object has administered a combination of 15 grains of precipitated sulphur and 4 grains of menthol, given two or three times a day over a period of several months.

In the thirty-three cases of acne mentioned above, which included cases of acne simplex, acne pustulosa, and acne indurata, treatment on these lines was very successful, substantial improvement being seen in all the cases and recovery in many. In one case the medicine gave rise to diarrhea with colic-like pains, but in the others there were no unpleasant by-effects. The first result of the treatment was that the stools became pultaceous, and the output of phenol sank to 0.01, or at the highest to 0.07, as opposed to an average output of 0.101 grams which had been previously observed. With this fall in the output of phenol improvement began, and often in the first three or four weeks the acne papules were observed to disappear more quickly. During the next four to eight weeks in all but one obstinate case new papules appeared with much less frequency; and in nine cases, after three months' treatment, no new papules formed. Some of the cases have now been as long as eighteen months without relapse and may be considered to have completely recovered. During the internal treatment, local treatment, although it was not altogether discontinued, was reduced to a minimum.

# GLEANINGS *from* FOREIGN FIELDS

TRANSLATED BY E. M. EPSTEIN, M.D.

## THE BENEFITS OF SALINE PURGATION

How the saline purgatives act and some of the advantages of the remedies of this class. Their uses and limitations in the treatment of disease

AFTER abandoning the osmotic theories of Poiseville and Liebig, we have the labors of Wallace and Schmiedeberg, which have demonstrated that the essential action of the saline purgatives is to prevent the absorption of the liquid contents of the intestine or that which is secreted by it. In this way is explained the liquidity of the stools following the administration of salines. This action is equally the effect of the sulphate of sodium and of the sulphate of magnesium, which are the most extensively used and the oldest appreciated.

But according to the recent labors of Holberg it seems that it is the ion of magnesium which possesses specially the purgative force, and it is this which assures for it the place in the greater part of the isotonic saline solutions. Clinicians had already come to the same conclusion when the interesting work by Loeb and MacCallum clearly demonstrated that the activity of magnesium sulphate is due to the hyperexcitability of the intestinal neuromuscular apparatus which is provoked by its presence by a kind of physiologic catalytic force.

Effervescent magnesium sulphate acts not merely as a copragogic laxative but it constitutes rather the surest remedy against stercoremia, that frequently unrecognized autointoxication because of its insidious and deceiving approach. This remedy prevents those abdominolumbar aches and pains caused by coprostasis; cleans the tongue promptly and purifies the breath of "auto-intoxicates;" keeps off the various cutaneous manifestations of evil, such as urticaria, eczema, acne, furunculosis, etc., all of which are frequently provoked by intestinal stasis. Equally as often does this remedy triumph over neurasthenic irritations and over the tiredness of life on the part of dyspeptics. With effervescent magnesium sulphate properly diluted, persons predisposed will escape their usual enteralgia or colitis.

Effervescent magnesium sulphate retards in no wise stomach-digestion, but rather improves it, especially when the remedy is dissolved in hot water. It does not burden the intestines with any work of disintegration or chemical modification, and does not dehydrate excessively the serum of the blood as certain too-concentrated mineral purgative waters do. Diuresis, as well, is favorably influenced by this remedy, and in this way the organic fluids are rendered perfectly isotonic. (Achard). This beautifully regulating mechanism is an extremely valuable recourse which we can take in the cure of a number of acute and chronic cases which cannot be enumerated in this short article.

When we reflect upon the fact that nearly one-third of the daily fecal mass is made up of microbes, to the number of thirty or forty

billions in each stool, we begin then to see the indispensable need of conquering normal and regular alvine liberty for humanity. It is by means of saline purgation that we avoid most surely the septicemia by the colon bacilli. It is easily perceived how productive that state of things must be of various severe disease-attacks. In the female coprostasis may cause uterine infection and aggravate considerably the puerperal state and the uterine pathological condition. In the pregnant female there is that everlasting constipation, nausea, and often that vomiting which is claimed to be uncontrollable, and yet all these are nothing else than stercoremia. A digital examination *per vaginam* may detect in the rectum a mass of such hardness as to make us think of an osseous projection obstructing the normal pelvic diameters. How easily uterine inertia can supervene in the presence of such fecal retention is readily conceivable. It is when the woman lies in bed after delivery that coprostatic accentuation is capable of engendering certain febrile and other symptoms very analogous to puerperal infection.

In enteritis and dysenteries effervescent magnesium sulphate constitutes the best eccoprotic when taken daily in feeble doses. It is best prescribed to be taken in a hot carminative infusion of anise, mint or chamomile. The remedy is not a mere popular evacuant but a real etiologic medicament which can be given in fractional doses. Rightly did Soulier protest against the extreme doses of purgative salines, hurtful at times and unnecessary at all times, since five to ten grams (75 to 150 grains) give as good results as thirty or sixty grams (1 to 2 ounces).

In arthritics and uricemics the magnesium salts form in the blood double soluble salts, eliminate soluble urates, absorb the leucomains and expel organic ammonias by the renal filter. In portal-vein stasis common to sedentary gross eaters, in obstructions of the abdominal veins, in abdominal obesity, or in plethora and hepatic turgescence, the effervescent magnesium sulphate becomes of marvelous use to robust adults by stirring up the movement of emunctories, draining excessive serosities, oxidizing the leucocytes and fatty globules, and equalizing a torpid circulation. It is also an excellent derivative for women who suffer at the menopause. As a type of gastric purgation in the way of serous depletion, more gastric than intestinal, according to Dr. Loeper, this granular salt of effervescent magnesium sulphate facilitates the pepsiniferous exudation into the cavity of the stomach, quiets gastric irritability and removes spastic cardialgia.

(*To be continued*)

## TRANSPLANTATION OF THYROID GRAFTS INTO THE SKIN

It is well known that in myxedematous conditions ingestion of thyroid material obtained from an animal and administered under any form will to some extent restore the normal condition, but the treatment is only palliative and there is a possibility of a kind of tolerance to it being established so that the therapeutic effect is lost. Many attempts have therefore been made to transplant or graft portions of thyroid gland under the skin, but all such endeavors have failed until lately. Professor Charrin of the College of France and M. Christiani have, however, at last solved the problem by improving the operative methods and employing a great many very small portions of thyroid glands taken from animals of the same species and transplanted with the utmost celerity. At a recent meeting of the Paris Academy of Sciences held on July 2 they showed a young woman who in consequence of having no thyroid gland and showing symptoms of myxedema had been treated with 34 drops of a thyroid solution every day. After having received thirty-eight thyroid grafts in two operations she was able two years afterward greatly to reduce the dose of the solution, so that she now took only from two to four drops, i. e., 0.1 part by weight instead of 1.5. She has, moreover, become the mother of a normal infant and during her pregnancy the thyroid grafts became enlarged, just as

happens with the thyroid gland in pregnancy under normal conditions. The thyroid grafts have preserved their glandular nature. This case seems to point the way to a new method of treatment.—*The Lancet*, May 26, 1906, p. 1492.

## A CASE OF GIANTISM

Knöpfelmacher exhibited before the Gesellschaft für Innere Medizin at its session in Vienna (November 22, 1906) a case of a six-year old boy who is of uniform giant growth. The child has been under observation for the last three years. He has now a height of 58.4 inches, the upper extremity measures 22.8, the lower extremity 26.8 inches. The hand measures 6 inches, and the foot 6.4 inches. The entire skeleton is extra powerful and broadly developed, and the whole body perfectly proportioned. The musculature is strongly developed, his brute strength out of proportion to the age. Especially remarkable is the strong development of the genital organs, which by their size, condition and appearance point to far-advanced puberty. The penis is about four inches long, the testicles about the size of pigeon-eggs; the pubic hair is abundant, axillary hair absent; there is just an indication of a mustache and a very light beard. The child is imbecile.

X-ray examination of the bones shows an advanced state of ossification of the carpus and tarsus; epiphysial lines still open. The speaker regards the case one of giantism consequent upon premature puberty. The influence of the generative glands upon human growth is well known and the relation of this child to his skin, skeleton and musculature is that of a mature man already largely protected against the influence of the generative glands.

Zappert called attention to a very similar case reported by Hudovernig, where the giant-growth of a boy was concomitant with an early development of the genitals. Treatment with thyroidin and a combination of this with iodine had no effect in this case, but the administration of ovarin tablets exerted a decidedly good effect upon the mental functions of the boy as well as checking his growth.

Knöpfelmacher remarked in addition to Zappert's amplifications that repeatedly taken x-ray pictures of the skull showed nothing to indicate any hypophysial tumors in his case, and the entire circumstances of the child showed nothing in favor of such tumor.—*Wiener Med. Wochenschr.* No. 50, p. 2463.

## ANTIDIPHTHERIA SERUM AGAINST ERYSIPELAS

Falcioni says in *Gazetta degli Ospedali*, 1906, p. 1358, that he used that serum with good effects in erysipelas. The quantities used were relatively large, above 3,000 units. In one case the erysipelatous patches were brushed over with the same serum. The mechanism of the effect may be explained by the assumption of a leukocytosis induced by the serum injected.

## PHILIPPINE WOOD-OILS

Of these A. M. Clover reports (*Chem. Ztg.*, 1906, Rep. 148) as follows: These wood-oils are very similar to the balsams of capaiba and of gurjun, and are not to be confounded with the Chinese desiccating wood-oils, or tung oil from aleurites cordata. The Philippine oils are slightly drying liquid resins which contain a large amount of volatile bodies that may reach 75 percent and may consist entirely of the sesquiterpene group. No low-boiling terpene was met with in any specimen. The more viscid of the fluid resins contain, on the contrary, almost always terpenes, while the oils amount rarely to over 25 percent. The author describes the supa oil from Sindoza Wallichii, the bala oil from Apitonz, and the malapah oil from Panao. The last-mentioned two trees belong to the Dipterocarpus family. The supa oil is most like copaiba and gurjun balsams; it contains no water and leaves in distilling a thickly fluid residue, while the dipterocarpus oil contains a large amount of water and gives a solid residue

on distillation.—*Pharmaceut. Centralh.* No. 2, 1907, p. 25.

## CORROSIVE SUBLIMATE ANTIDOTE

A woman took five sublimate pastiles, in all (weighing?) about 2.6 grams (40 grains). She was treated as follows, being perfectly cured in one or two days: In the start she was given 120 grams (30 drams) of a mixture of lime water and codliver oil which happened to be at hand, and after that 30 grams (7½ drams), then white of egg and milk.—*Lancet*, 1906, p. 653, in *Pharmac. Centralh.*, No. 4, p. 78.)

## REIMPLANTATION OF OVARIES IN HUMAN BEINGS

Pankow of Freiburg, in speaking to the Versammlung Deutscher Naturforscher und Aerzte in Stuttgart on the subject, said: "We distinguish between autoplastic (of the same female) and homoplastic (from another female) implantations." Pankow reported nine cases of his own, seven of these being autoplastic and two homoplastic ones. The seven former patients were operated upon, one for osteomalacia, four for hemorrhage, one for hemorrhage and dysmenorrhea, and one for dysmenorrhea alone. The ovaries were stitched in a peritoneal fold between the bladder and uterus. The grafts took in five of the cases. Results are as yet doubtful; the dysmenorrhea and hemorrhage cases showed no, or only slight, improvement. In the osteomalacia cases there was at first rapid improvement, but when the menstrual period came about there again was aggravation, which did not yield till after general treatment with brine baths and codliver oil, whereupon complete cure followed. The two homoplastic cases were unsuccessful. Still, success may possibly be attained by the transplantation of ovaries from newborn babes.

König of Freiburg, i. B., does not employ sections of ovaries from newly born children, believing that Weismann's theory can be solved by numerous homoplastic transplantations.

Pankow noticed that the implanted ovaries adapt themselves to their new functions in a short time.—*Wiener Med. Wochenschr.* No. 50, 1906, p. 2460.

## THE SODA-WATER SYPHON IN ANGINAS

F. Monod of Montreal discovered an extremely beneficial therapeutic use of the common soda-water syphon, for which many a distressed angina patient will be grateful to him. It will take the place of the doubtfully useful but rarely rightly applied gargle. The doctor gives the following directions:

Take a syphon which has been long enough in the sick-room to have acquired its temperature, for warming will burst it, while when too cool the patient will not be able to use it. Fit on to the nozzle a rubber tube some ten inches long (a rectal tube may be a desirable size), and fasten the tube to the nozzle with a cord. The patient can operate the instrument himself. Sitting up in bed with a basin on his knees, he introduces with one hand the tube into the mouth and with the other, holding and supporting the top of the syphon, he can press the valve more or less, according to the amount and force of the fluid desired to be sprayed against the inflamed parts in whatever direction. The gaseous water flows out of the mouth into the basin, and thus a quarter or half of a syphon can be uninterruptedly thrown against the tonsils and pharynx. At times vomiting will occur and will certainly act beneficially.

The gaseous water acts as well by the force, which the patient regulates himself, as also through the carbonic acid which bathes the painful points. The patient experiences relief at the very first application (an observation I made on myself more than once), and he may repeat this simple and beneficial operation every hour or oftener.—*Le Jour. d. Medic. et d. Chirurg.*, Montreal, Can., 1906, p. 264.

# TREATMENT OF SUMMER DIARRHEA

Several papers by different authors giving valuable suggestions concerning the management of the common hot-weather disorders of the alimentary tract

IN choosing the subject "Acute Diarrheal Diseases of Children," I wish to include in a general way those conditions attended by frequent evacuations of the bowels, originating from infection in the alimentary tract. Our textbooks give us a number of clinical and pathological divisions, but it is difficult and often impossible to differentiate, chemically, the different varieties. There are no well-defined symptoms which enable us always to distinguish one variety from another. No part of the alimentary tract will remain infected very long without involving the parts adjacent to it.

Dr. Kerby informs us that no man, however extensive his experience may be, can differentiate these conditions with any degree of certainty. He personally conducted 218 autopsies on children who died from summer diarrhea. Where he expected gross lesions, he often found them slight. In other cases, which showed but little mucus during life and no blood, there were extensive ulcerations of the colon extending to the peritoneal coat.

Our treatment, therefore, must be directed to symptoms as they arise and to meet special indications. In every case of acute infantile diarrhea, we have infection in some part of the intestinal tract. It is, therefore, necessary to get rid of the infected material and to render the contents of the bowel as unfavorable a culture medium for infection as possible. The first indication is met by administering cathartics and employing enemata and lavage. The second indication is met by stopping all food, especially milk, and administering intestinal antiseptics.

First let us consider the milder form. During the summer months children are often brought to our office or some member of the family will call, saying that the baby has had severe diarrhea for several days, is somewhat restless and irritable, probably has a slight rise in temperature, but takes nourishment and is at times playful. In this class of cases we may conclude that we simply have fermentative and putrefactive changes in the intestinal tract without systemic absorption. We give a dose of castor oil to assist nature in sweeping out the infected material, stop feeding for a day or two, and our little patient is well.

In considering the more severe form we find the conditions different. The symptoms usually develop suddenly or may follow indigestion of short duration. There is slight fever, rapid pulse, thirst, vomiting, and diarrhea. There is often an anxious expression, the child may be on the verge of convulsions, or it may have had convulsions and be in a partial stupor. In this class of cases we have infection and inflammation in the alimentary tract. We also have a rapid absorption of toxic products from the gut into the general circulation, with symptoms

of autointoxication rapidly developing. We should, therefore, empty the gastrointestinal tract as rapidly and thoroughly as possible to check further absorption of infected products therefrom.

First, give a large dose of castor oil, which in these cases is the best purgative we have. We will, however, frequently have considerable gastric irritation, where even a teaspoonful of water will be rejected as soon as swallowed. In these cases I wash out the stomach thoroughly with a normal salt solution. Then, before removing the tube, I administer a full-sized dose of oil by gavage, often as much as an ounce to a child in the second summer. The addition of a little sodium bicarbonate will hasten and increase the effect of the oil. Irrigate the bowel thoroughly, using a rubber catheter attached to a fountain syringe. It removes infected material and stimulates the peristaltic action of the bowels. After washing out the stomach and bowels, and securing the action of the oil, I give zinc sulphocarbolate as an intestinal antiseptic. I have used it for the past seven years and have found it most satisfactory. It is cheap, perfectly harmless, and very effective.

Bismuth subnitrate may be given in combination with the zinc sulphocarbolate, especially if there is much irritation. To be of any use it should be given in not less than 10-grain doses every two hours, and to be of service it must produce black stools, which indicate that some of the bismuth subnitrate has been changed into bismuth sulphide. If it passes through the bowels entirely unchanged it certainly has no effect.

If the stools are colorless, indicating glandular inactivity, podophyllin in small repeated doses is the remedy.

To equalize the circulation and to bring the blood to the surface from the congested capillaries within, where the surface of the body and extremities are cold, and rectal temperature high, atropine is the best preparation we have. A mustard plaster applied over the abdomen is also very effective.

It is seldom necessary to resort to opiates and they should be avoided if possible.

Milk diet must be stopped at once. This is absolutely necessary. As a substitute for milk, we may employ some of the cereal waters. I usually give barley or rice water. To the cereal water we may add a little beef extract or broth. The latter must be added sparingly or it may produce decided laxative effects. Albumen water, which used to be used as a substitute for milk, is being discarded. It has been found a very good culture medium for germs, and it is not very nourishing.

If gastric irritation continues, wash the stomach once a day. It is also well to give a high enema once a day, and later in the attack, to use a mild solution of tannic acid or silver nitrate for irrigating the colon. If the diarrhea is very profuse and there is much rectal irritation, two ounces of starch water with a few drops of laudanum may be employed. An acid condition of the stomach and bowels can be controlled by small doses of the official elixir of neutralizing cordial.

Symptoms of collapse require stimulants, brandy, strychnine, and camphor.

We must keep the skin and kidneys active! This is best accomplished by frequent sponging and by giving plenty of water.

It is necessary to study carefully the hygienic surroundings of the little patient. The child should be in a large, well-ventilated room, and have an abundance of fresh air and sunshine.

There are many symptoms and complications that arise in a severe case of summer diarrhea of children. They will require special study and treatment. The means of prevention rest in the education of the mother. They should be taught how to feed their children properly. If the younger generation of women who are trying to master music and painting, for which so few have special talent, would devote a few of their many leisure hours to the study of the care and rearing of children, future generations would experience a very perceptible reduction of the

high death-rate which now prevails among children from gastrointestinal diseases.

—:o:—

We wish we knew to whom to credit this excellent paper—but we don't! Unfortunately the author neglected to sign his name to it, and it became detached from the letter which undoubtedly accompanied it. If the doctor will enlighten us we will publish his name next month.—Ed.

## SUCCESS IN DIARRHEAL TROUBLES

As the diarrheal season is here, and as we are having an epidemic here at the present time among children and grown people, I will give you the treatment I have found uniformly successful for the past ten years. During this period I have lost but four patients (and these were bottle-fed and very delicate), and I have had my share of cases, both children and adults. If there is nausea and vomiting I give dosimetric doses of copper arsenite until those symptoms abate. Then I give small and frequently repeated doses of calomel until the bowels are thoroughly emptied and follow with a solution of the sulphocarbolates of zinc, sodium and calcium in elixir lactopeptine.

I give the sulphocarbolates in as large doses as is possible without nauseating. I have given a child five months old five grains every hour for a day, with only the best results. The sulphocarbolates are absolutely non-toxic.

I give adults a few doses of chlorodyne in granule form and then give the sulphocarbolates, and the ailment is cured in a very short time. This is the treatment advocated by you for years and it is all you claim it to be. I was the first one to introduce the sulphocarbolates into this and adjoining counties. There is no ailment in which intestinal antisepsis is not a very important factor in the treatment and the sulphocarbolates are the intestinal antiseptics *par excellence*.

Why doctors will cling to the old treatment that has and is and always will be a failure is more than I can account for. Dr. Abbott's ideas are engraving themselves in the minds of all practical physicians and are destined to be embodied in the practice of the future. Sulphocarbolates, calx iodata, sodium succinate and calcium sulphide are monuments to the therapeutic ability of yourself and Dr. Waugh, that will be more enduring than slabs of granite.

I do not write this for publication. I thought as I had learned so much of practical medicine from you I would give you a word of encouragement. You have made a gallant fight and the stragglers of the banished foe will have to be gathered together and given a probationary chance, that they may see the error of their way and become aggressive advocates of the cause they once opposed.

J. E. McQuain.

Spencer, W. Va.

—:o:—

We are going to take the risk of incurring Dr. McQuain's displeasure by printing this letter, though it was not intended for publication. It shows the frame of mind of many practical men who through the germinating and growth of the alkaloidal idea within their minds are enabled to accomplish more, succeed better. We appreciate greatly the kind compliments to ourselves.—Ed.

## THE ABDOMINAL BANDAGE FOR SUMMER COMPLAINT

In summer complaint I am with you all the way through in your methods of treatment, but I believe I can add "something good" that probably many of you use, but have failed to tell about, possibly not recognizing its great helpfulness.

In the daytime the abdomen is the most warmly clothed part of the body, too warmly perhaps—hence "softening." During the night it is at best only equally clothed with the rest of the body, or when the ordinary nightshirt is used, utterly naked, hence easily chilled.

Now not only are there often persistent pains, aches and colicky conditions, throughout the abdomen, largely due to the nightly

chilling, but an apparent weakness develops, leading to diarrhea and even dysentery. Again, when these conditions are present they are aggravated by these nightly chillings. Pass your hand over a sleeping person on a warm night. You will find him warm all over except the abdomen; this is cold and often clammy. The "something good" is a light woolen or flannel belly-band, worn only while in bed. These are furnished our soldiers when in the tropics. Those on the market are not satisfactory. A good one can be made by taking an old woolen undershirt that has shrunk until quite tight. Cut off the lower end so that it will be wide enough to cover the whole of the abdomen. This will remain in place nicely, and when it becomes loose washing will shrink it into place again.

Doctor, this will help in all summer troubles where the abdominal organs are involved. It prevents, it relieves, and it helps cure. I have used it very extensively both in tropical and temperate climates.

Wm. Bowen.

Knoxville, Tenn.

## THE TRUTH ABOUT TEXAS

I have seen two articles in The American Journal of Clinical Medicine that seem to have been written to advertise Texas. I am proud of our State and wish to see every good point shown to the world. I also think there are fine opportunities for those who wish to buy farms to find land in Texas. Still I am sure great harm is done our people and an injustice to those who come here by making absurd and extravagant claims as to what can be done.

This immigration business is becoming a graft pure and simple. I say this because I have been in a district where hundreds of farmers from Illinois, Ohio, etc., have been brought and sold land. They were intelligent, but unfortunately never dreamed that everything was misrepresented to them. They bought land, paid three or four prices for the same, and tried to raise the crops agents said would grow, only to find they had bought greengoods. I have done practice for these people and in their misfortunes have grown to a full state of sympathy for them. I have seen a few nearly starve to death and others with broken hearts and ruined homes, scattered from one place to another to get on their feet again. The railroad companies and real-estate men are using every plan possible to induce farmers from the North to come to Texas. When this is done in a fair way, all is well, but, I am sorry to say, such is not always the case.

Some may ask, why I trouble myself about them? It is because I know it is human to err, and when that powerful force of advertising is used to betray, victims will be found. It is because of having lived on a farm I know the many ties and virtues that surround this fireside; it is because the doctor enjoys the full confidence of many such homes and should know both sides of the question; and it is because I would like to see Texas grow, as it will, in an honest way, and because I believe in the golden rule, "Do unto others as you would have them do unto you."

William Ehrhardt.

Westfield, Tex.

—:o:—

We are optimists. We find health, happiness and prosperity in looking at the bright side of things. We do this from principle and because embued with a deep sense of duty. There usually are plenty of men to take the other side. Nevertheless, even we can call attention to that gloomy underside which always coexists with the bright one. Our contention that every cloud has a silver lining does not in any way carry with it any argument that the silver lining is all there is to the cloud. If there is any corner in this world in which men cannot be found who will take advantage of inexperience, we have never yet detected that place. If any man wants to change his location for a better one and he go north, south, east, west, or to any intermediate point of the compass, we would suggest that he keep a tight hold on his money—still better, that he carefully

conceal the fact that he has any money or is looking for chances until he is fully satisfied that he is not being tricked. This applies to Chicago even, hence, if we say that according to our correspondent it also applies to Texas, we feel very sure that our friends in that great commonwealth will not take offense.—Ed.

## "UTERINE HEMORRHAGE"—AN EXPLANATION

In my article entitled "Uterine Hemorrhage," in August Clinical Medicine, you have in your comment and in the title of the article taken the wrong view of my use of acetanilid. Better call the article "Threatened Miscarriage," as I do not use or claim any effect in the hemorrhage from uterus, but solely in the threatened abortion, where pain and other symptoms are present. In hemorrhage alone I should not use it, and discontinue it often after but a few doses when contraction pains have mostly ceased, but continue the other part of the prescription, i. e., hydrastin and hyoscyamine, or else give Buckley's uterine tonic or viburnin.

S. H. Rabuck.

Gloversville, N. Y.

## PRIVATE HOSPITALS—DISPENSING AND PRESCRIBING

For the past two years I have read Clinical Medicine with great interest, from cover to cover, and I consider it the best medical journal published. It is "hot stuff," Doctor, though seemingly just, fair and square to all.

You ask those of us who have opened private hospitals why we have done so, and to give our experiences. My own reasons are many, the principal one being to have my serious cases under my immediate care, and this is the only way we can secure it in the country. We have no large hospitals to run to like physicians practising in the large cities.

I do not treat the name of the disease, neither do I give shotgun doses, but rather treat the conditions as they arise, giving the specific drug for the specific indication and the smallest dose possible (that will give the required result) frequently repeated.

Under this method of practice it requires very close attention to your patient; therefore a private hospital is very essential. I have found it the secret of success. To those brothers who write prescriptions: My experience has been that patients often get too much "dope"—too much of "something just as good." Another thing, there is too much refilling, in spite of "non repetatur" on the prescription blanks. Doctors, let them come to you for their medicine, then you will know how they are getting along at least. Yes, I find patients that want a lot of medicine for their money. In such cases I give the required amount of "active principle" for thirty-two doses with aromatic cascara sagrada, gtt. 10, aqua dest., q. s. ad. ozs. 4. They gladly pay for the extra water they get. I do not consider it deception. Do you?

Now a word on compounds and I am through. I do not believe in physicians buying compounds, for you seldom find two cases precisely alike. True, you will find cases where a combination of two or more drugs is indicated. Then let the attending physician compound it to suit that individual case. I think he is able. Don't you, Doctor?

T. H. Larson.

Cushing, Okla.

## THE VASOMOTOR NERVES AND DISEASE

In the last sentence of your article on page 823 in the July number of Clinical Medicine, entitled "Aborting Specific Disease," you say: "But Boston will take up a new thought far sooner than Philadelphia or any other of the great centers." That might be true had you limited the remark to medical thought. *The Medical World* has for some time been giving us thoughts on economics, and while it is still far in the rear when compared with the true brotherhood movement, or socialism, it yet is worthy of our best thought, as it discusses the means by

which the people live—attain their bread and butter.

And again, while your journal is alive to active-principle therapy, you have not advanced to the fact that all medicines act on effects, and until we can act and direct our efforts against a cause and remove it, we shall not be doing our full duty as physicians.

There is a cause for every effect. When we have perfect circulation to all parts we have perfect health, so far as consistent with the age of the individual and the condition of his constitution tired from overwork, due to the all-absorbing thought of the capitalists—profits.

The vasomotor system of nerves controls the circulation to all parts of the system. When they are not interfered with the circulation is normal and capable of protecting itself against the invasion of nearly all germs; but a bad circulation to any part lowers its vitality and makes it easy for the germs of disease to find a lodgment, if indeed it does not set up inflammation or create a diseased area independently.

If these are facts, the highest possible help would be to restore the normal circulation. It is evident that no medicine does this, but acts on effects alone, directly or indirectly. So long as the nerves are intact and with no obstruction along their course, they are capable of conveying the nervous force throughout the system, but let us interfere with the nerves somewhere along their course, we have over- and under-stimulation, which means dilation or constriction of the arteries or arterioles—hence too much or too little blood to a part. This lowers the vitality to that part, and allows it to become an easy prey to any germ capable of finding lodgment, if indeed, as I said before, it does not set up an independent inflammation or create a diseased area independently.

If the nerves then are prevented from functioning, by some obstruction along their course, where may it be? It must be in some part capable of doing this. It cannot be in parts wholly soft, but must be where the nerve passes through, over, across or around some bone or bones, where the bones themselves have shifted by some collision, or spasmodically contracted muscle pressing against a bone.

I have found these to be the causes and cured scores of cases where other doctors failed with medicine. If you should be interested I will make a report of cases treated, with results, during the past two years.

GEO. B. KLINE.

McMechen, W. Va.

—:o:—

Interesting, Doctor, suggestive. But what is it—osteopathy?—ED.

## A HOMEMADE FILE FOR CLIPPINGS

I took thirty-six cigar boxes, $2\frac{1}{2}$ by $5\frac{1}{4}$ by $8\frac{1}{2}$ inches in dimension and covered one end with my office letterhead, cut to fit neatly. Next I pasted on a Dennison's gummed paper-letter, in alphabetical order. Then on the bottom of the boxes I pasted another sheet of paper for an index. They were labeled, respectively, Book Reviews, Receipts, Miscellaneous, Tuberculosis, Gonorrhea, Electrotherapeutics, Syphilis, Pneumonia, Bronchitis, Personal, New and Non-Official Remedies, and so on. I piled my boxes in four rows. I took boards $8\frac{1}{2}$ inches wide and sawed off five pieces 22 inches in length and two others $25\frac{1}{2}$ inches long. These I nailed together and covered the back. I painted the framework with black varnish, screwed a little drawer-pull into each box-end, and my filing cabinet was complete. Total cost less than two dollars. Value great.

H. P. BAGLEY.

Chicago, Ill.

—:o:—

Something of this kind every doctor should have. If he feels that he can afford it there are plenty of nice filing cabinets, loose-leaf binders, patent scrap-books, etc. But if the dollars count he can take a leaf out of the experience-book of Dr. Bagley to good account. The "good things" contained in the odd copies of journals, stray reprints and advertising literature of the best manufacturing houses should never be allowed to go to waste. If so saved that you can put

your finger on them when wanted you will find that they mean *dollars*. In this connection we want to urge upon every doctor the importance of having his journals bound. A file of CLINICAL MEDICINE is a valuable addition to any library—something you can refer to for help in almost every emergency.—ED.

## MILK-SICKNESS—TREMBLES

An article bearing the above title by Dr. Geo. H. Candler of Chicago, appearing in the July number of CLINICAL MEDICINE, brings to my mind recollections of scenes and experiments conducted by my stepfather several years ago. Had he lived undoubtedly he would have been richly paid for his untiring efforts to give to the people of Indiana and other infected states that which they had so long desired and hoped for, namely, the true cause of milk-sickness. Indiana in those days suffered a tremendous death rate due to this particular disorder. Well do I remember of two brothers, two of the best known and well-respected young men in our neighborhood, dying of the disease. They contracted it from eating butter. I did not see them during their sickness, but knew them quite well, having attended a singing school conducted by one of them. I was too young to give the subject of milk-sickness much thought, but being associated with my father in his experiments naturally learned a great many things along that line. His experiments were conducted with sheep, cattle and hogs.

It is only through eating butter or drinking milk from infected cattle that the disease is contracted by human beings. That the "trembles" is produced by stock eating a certain plant can and has been demonstrated beyond a doubt.

My father was thirteen years experimenting before he was able to prove his discovery. Our own farm was infected and we lost a great many cattle from the disorder. We never lost a milk cow, so far as I remember, but many young heifers and steers which grazed in the woods and an old "deadening" on the place. Our milk cows were always kept on tame grass in the open fields. I presume this accounts for none of the family having the disease. There was at this time a very large sum of money offered by the state of Indiana for the discovery of that which produced the disorder. My father after concluding his experiments and being ready to demonstrate and prove his claims, took the matter before the Indiana state legislature and while there took sick, came home and died, leaving the world no wiser in that respect except what knowledge he had imparted to his two little boys (myself and brother). But as we had a great deal to do helping him in his work, naturally we learned a great many things in connection therewith. Many times have I seen him have sheep, cattle and hogs in different pens, all with the trembles. It is simply wonderful, as well as pitiable, to see these poor animals stand and tremble as though they had a severe chill, or better, perhaps, a rigor of the most severe form. A great many of these animals died during the experimentation.

I noticed a few articles in CLINICAL MEDICINE some time ago in reference to the etiological factor of milk-sickness and the diversity of opinion was amusing as well as interesting, some believing it to be vaporous emanations from certain soils, or chemicals hidden beneath the soil-surface. One man's opinion was that it was a plant. This is correct; but as there are many plants it is necessary to know the particular kind in order that we may eradicate it from the farms. I have seen cattle that had eaten the weed die very soon after drinking water. They seem to have an intense desire for water soon after eating the weed. I do not believe it is essential to kill the cattle as soon as they are known to have the trembles, but I do believe we ought to purge them thoroughly, and keep them away from water till they are past the danger point, for soon after filling themselves with water they swell up and it looks as though they would burst. I have never seen a case of milk-sickness,

consequently cannot say anything as to the symptomatology. But the report of Dr. Candler would at once suggest the treatment. The treatment outlined by him would certainly meet the requirements.

In conclusion I would say that I do not believe the etiology to be due to a fungus, but to one and only one particular plant, eupatorium ageratoides—white snakeroot, if you please, a plant indigenous to places like those just mentioned. Any landowner may clear his farm from all danger of the trembles by removing the plant, as we did ours. The remedy is in prophylaxis.

L. J. SPICKARD.

Blanchester, Ohio.

## MILK-SICKNESS IN TENNESSEE

On July 11, 1865, I located at Huntingdon, Tenn., for the practice of medicine. A section of country northeast of town, six or seven miles across, was subject to what is known as milk-sickness. Trembles, tires, and various other names have been applied to the disorder. I was frequently called to see these cases during the summer and fall. When they were taken in time and a proper course of treatment instituted recovery was generally the result.

The patient is taken with sickness of the stomach, constipation of the bowels, and has an offensive breath. The features are haggard and shrunken, the skin sallow, the circulation generally weak, and there is slight elevation of temperature; in some cases the temperature is subnormal. These are the most prominent symptoms in the uncomplicated cases that have come under my notice.

In brief, the treatment is to keep the bowels open with castor oil. Give the oil in sufficient quantity to move the bowels freely every day; if it is rejected, repeat the dose immediately until it is retained and acts. It is all-important in the treatment of milk-sickness to keep the bowels open daily, so that the ptomains may pass off. If the patient is suffered to remain constipated any considerable length of time the prognosis is not so favorable. Two or three grains of sodium bicarbonate in an ounce of water should be given every four hours, or as needed to correct the acidity of stomach. When a stimulant is indicated, whisky seems to act well; the sick have a morbid craving for it and I let them have it. For sick stomach, a weak solution of carbolic acid, essence of peppermint or any other aromatic the patient may crave is allowed. Locally a mustard plaster applied over the epigastric region does good. The stomach remedies are mere palliatives. The poisons must be eliminated from the system through the alimentary canal, so do not neglect the *castor oil*, soda and whisky.

As to the cause of milk-sickness, there are conflicting opinions. By some it is thought to be mineral or gaseous emanations from the earth settling on vegetation, but this idea has been eliminated from the catalog of causes by the disappearance of the disease when the land is put in cultivation.

I have been engaged in the practice of medicine in the infected district, if I may be allowed the term, over forty years, and have given the subject close attention. I have found a weed growing one to three feet high in the localities in which there is milk-sickness, *and nowhere else*, sending forth a beautiful white flower in August and September. Finding the herb so abundant, like a flower garden in the bushes in some places, I decided to experiment with it, with the view of determining its effect, if any, in the causation of milk-sickness.

Two yearling heifers and one pig five months old were selected for this purpose. One of the heifers was put in a barn and fed on the weed, chopped up and mixed with bran. On the eighth day the heifer became nervous and showed evident symptoms of the disease; the weed was discontinued, after which the feed was bran, corn and hay. The heifer grew worse and died on the fifteenth day from the commencement of the experiment. A post-mortem examination was made, and the contents of the alimentary canal were found dry, hard and in balls or lumps.

The dead body was put in a lot near by. Five dogs aided in devouring the carcass. All the dogs were made sick by eating the meat and one of the number was unable to get out of the enclosure. The pig was fed on the root of the weed chopped up and mixed with bread and corn. It became sick in about a week and died on the fourteenth day after it commenced eating the weed.

The root of the plant emits an aromatic odor, when mashed between the fingers, similar to angelica. All observant farmers know that hogs will root deep in the ground for angelica. Hogs have the disease primarily by eating the root in the rooting season, the latter part of winter and spring. They contract it secondarily at any time of the year, by eating the meat or any food product coming from an animal laboring under the disease.

Clearing up the land and cultivating it puts an end to the growth of the plant, and *the disease is no more in that neighborhood.* Wild virgin soil is the natural habitat of this plant. As a precaution against the disease, farmers formerly pastured their cows in the summer and fall on land that had been cultivated. Now since this plant (eupatorium ageratoides) is pretty well thinned out they let them roam at large on the range and in spite of this not a case of milk-sickness has occurred in that vicinity for a number of years to my certain knowledge.

It would seem, as I understand it, that the properties of this plant in some way unknown to science have the power or are capable of generating an *organized ferment* with inherent vitality sufficient to propagate its species when conditions are favorable. This may never be known, as the disease is gradually becoming less frequent as the land where it formerly has prevailed goes into cultivation. Ultimately it will doubtless entirely disappear, or at least nearly so.

The second heifer was fed on the weed only two or three days when it requires eight or ten days to develop the specific effect of the plant.

The experiment on the heifers and pig with eupatorium ageratoides was made in 1877 and 1878.

J. W. McCall.

Huntingdon, Tenn.

—:o:—

It is an interesting fact that both Dr. McCall and Dr. Spickard's stepfather arrived at exactly the same conclusion concerning the cause of this now uncommon disease.—Ed.

## THUJA FOR HEMORRHOIDS

In the May issue of your helpful journal I told of a new treatment for hemorrhoids. From the large number of inquiries received in regard to the item (all of which have been answered by mail) it seems that doctors are taking much interest in the matter and, as all have not written who may desire the information, I beg to give a brief reply to the questions asked.

The medicine is in the form of a pure fluid extract. It is not expensive, and is sold by nearly every wholesale house in America, coming in four-ounce bottles. I have used it ten years and never heard of a case that it did not cure when used as directed. The patient does not stop work. The first used may be reduced with water one-half or more, but should rapidly increase to full strength. I many times use full strength from the first. I give medicine and syringe and he uses it himself at his own home. The cure is usually complete in two weeks but let him use it once a day one week longer. Treat constipation with laxatives but avoid cathartics. If there is bleeding or rawness it bites quite sharply a few times but after that it is very mild. If used properly it is not at all severe. The quantity used is about one-half dram at a time. If tumors protrude they should be wet with the liquid also. If a case seems stubborn, look to it yourself and see if the remedy is being used correctly and put just where it should go. In some cases it should be sent higher than in others. Use your own good judgment as you do in your other work and at last you have a cure for piles without needle, ligature, fire or knife.

After using this remedy in hydrocele with perfect success it occurred to me that the same used in the rectum would cure piles. I tried it and the result was all that could be desired. Go thou and do likewise.

M. A. Morehouse.

Wevertown, N. Y.

—:o:—

The remedy referred to in the May number is Lloyd's specific thuja. Dr. Morehouse's suggestion certainly deserves a trial, though we cannot help feeling that he has had an exceptionally favorable class of cases to deal with. In severe cases of hemorrhoids a merely topical application could hardly prove curative. Note on page 1155 the picture of the doctor's home—"a little home and a little office where the little granules are much in favor."—Ed.

## POSTGRIPPAL NEURALGIA—BUT THE CAUSE?

Out of the little successes which naturally come to a man in the course of his professional experience (mine extends over a period of twenty-odd years), I have reported but few. Of the failures—and some of them were of the character which we refer to as "galling"—I have reported some of the worst that fell to my lot. In the ruins wrought by defeat one should search for the materials on which to found future successes. Let this be my justification for intruding my troubles on the journal "family." There is probably nothing in the case I shall report but the lesson, and I may be the only one who needs to learn it. It may not interest the brethren, and I may be merely too dull-witted to grasp the situation.

The Case: A boy of twelve, well-developed, well-nourished, somewhat coddled, with no undue proneness to sickness until about four years ago, since which time he was under the care of a medical friend for chronic cough until about one year ago. I believe the cough followed an attack of pneumonia, or "grip." His growth and nutrition remained continuously good.

He first came under my observation early last February with acute pneumonia affecting the left lower lobe and involving a portion of the middle lobe. Recovery appeared to be perfect. The treatment was alkaloidal—elimination, sedation, and support.

About the last of March he was brought in because of a cough with rather copious greenish expectoration, but his nutrition was excellent and he was going to school every day. Under arsenic iodide, scillitin, hypophosphites, and free elimination he improved promptly and by the middle of April the signs of an exudation had practically disappeared.

Near the close of the month there was an attack of acute bronchitis, which ceased almost wholly early in May, when he was again brought in, this time for a pain in the back—apparently a dorsointercostal neuralgia. The appetite was excellent and he was exceedingly well nourished, though there was a slight brownish coat on the tongue. He received calomel, soda and ipecac with podophyllin, followed by saline laxative every morning; in fact, the calomel and podophyllin were repeated so persistently that the father remarked that he never knew any one to require so much physic, which yet did not seem to clear up the tongue entirely. He also received cimicifugin, phytolaccin, xanthoxylin, scillitin, iridin and nuclein. Later I gave calcalith and salicylate of sodium, both alone and in conjunction with the alteratives named before. Of course, I gave him intestinal antiseptic tablets, ordered baths, hot air and hot water, renewed my efforts at elimination, but with little or no result.

The boy suffered so much pain at night that I gave him morphine and cannabin to insure sleep. After the first temporary relief from pain he looked brighter and seemed better; but in a few days the anodyne began to lose its effect, and I withdrew it for prudential reasons. I had already tried hyoscyamine, had failed to get relief from liberal doses of acetanilid, with a combination of phenacetin, salol, caffeine citrate, tartaric acid, and lastly, with "somnos." All the time I was trying to eliminate. Monobromated camphor did no better than the other sedatives, and the same may be said of the "five bromides."

This brings the history of my connection with the case up to May 27, when I last saw him.

As I told you at the outset, there is probably nothing in the case for any of us except the experience. This, however, may prove more precious than even temporary success. We get a deeper insight into human nature, if no more. Here I had been inclined to flatter myself that I had accomplished something: I had carried the lad successfully through a severe attack of lobar pneumonia, with three visits on three consecutive days and three subsequent prescriptions; I had imagined that when I had brought about resolution of the lingering exudate and secured an absolute *restitutio ad integram* that it might appeal to the parents; but when my treatment of this latter painful malady failed, as I willingly admit that it did, the parents looked at me as though I were a villain of the deepest dye, and took the boy to another man. They did it, too, with the utmost quietness and caution, again as though they were eluding a desperate character who might hold them up and compel the patient to swallow medicines at the point of a pistol. Not a hint, not a word. I had decided to advise a consultation, or a change of doctors, as they might elect, if my last prescription failed to relieve; but I should have remembered that "hell is paved with good intentions."

All this, you will say, is aside from the purpose of this report. Very well; but it may have its significance in another way: How about it, now, if a family is inimical to a physician, is it possible to find in that family a mantle to cover his sins? And may the prejudices of the parents filter out through the less dissimulative children?

To make a fair statement of what is to my mind somewhat of a mystery, let me add that the boy is naturally rather reticent, and during this latter illness wanted to be alone. Once when the mother tried to telephone me at night his paroxysm of pain suddenly ceased, and when the pain came on in the daytime, which was seldom, he would scream awhile with pain, then suddenly begin to whistle as though nothing were the matter.

The pain remained in his back only about one week, then he complained of pain very low down in the hypogastric region, and for a few days there was irritability of the bladder which yielded to the bromides. Thereafter, I believe, the pain localized itself in the legs, which, however, did not appear sensitive to pretty firm pressure. The urine was apparently normal in quantity and quality. No microscopical examination was made. With the exception of a few days he ate well. After a bad night he would look worn and hollow-eyed, with exaggerated facial lines and shadows, but a good night's sleep dissipated most of these signs. There never was any acute tenderness, fever, disturbed heart action, ataxic gait, tremors, uncontrollable sphincters, gastric crises, nor paresthesia. I believe he once complained of spots before the eyes.

My diagnosis was postgrippal neuralgia; this the other doctor scouted. It is said that he pronounced it an affection of the "membrane between the bones and the muscles," but, of course, rumors are untrustworthy. This may merely be the way it sounded to a layman. His first week's treatment was not a howling success, I understand, but after the lad had been left with him for a few days his improvement is reported to have been perfectly satisfactory.

Now, first, what ailed the boy? What was the basic pathological element, or elements, for I suspect that there was more than one?

Second, why did the malady prove so stubborn?

Third, why was the pain mostly at night?

Fourth, why were eliminants apparently of no avail?

Fifth, what was the undemonstrated element, judging by the symptoms related?

Sixth, (and here's the rub), where did I miss it in my therapeutics?

I trust that the brethren will discuss this case freely. It is not self-justification I am after, but truth. C. M. F.

—— Indiana.

—:o:—

Perhaps nothing tugs at the heart-strings of a doctor more than the ingratitude of

those from whom he feels that he has earned the right of sympathy and forbearance. Every doctor has had experiences like this one of "C. M. F." and knows exactly "how it feels."

The case is an extremely interesting one. We shall put it up to the readers of CLINICAL MEDICINE for discussion, for there are many points that may be brought out in this way—better than we can alone. In our opinion the doctor was right in calling the pains neuralgic. But what caused the neuralgia? That's the question. In a large percentage of cases neuralgia is simply an expression of toxemia — often from the bowel. When the cause is elsewhere, fecal absorption is *very* often a complicating factor. Apparently the doctor "cleaned out and cleaned up" thoroughly. But there remains the remote possibly that there was still a fecal accumulation which was not dislodged by the cathartics and which would have yielded to high enemas or an injection of kerosene. That is a possibility merely, but one which must be considered, for fecal accumulations are not so rare as many of us think.

Another doctor's home where CLINICAL MEDICINE is welcome.

But more probable is it that the key to causation lies in the night pains. Pain coming on at night in the majority of cases is ascribable to one of three causes: syphilis, rheumatism or malaria. Can all of these be excluded in this case? This we again put up to the reader. In our opinion there is at least a *suspicion* that the neuralgia was malarial in its origin—even though malaria be uncommon in that locality. Having practised in a malarial neighborhood the writer has become suspicious of all periodically recurring pains. At any rate it is a pity that there was no blood examination. The whole subject, ethical as well as diagnostic, is now given to the "family" for discussion.—ED.

## A PROMPT CURE FOR PULPITIS IN CHILDREN

Not infrequently we have brought to us children who are suffering from "toothache" and upon examination find the pulp of a molar exposed, the crown of the tooth having been destroyed by caries. The first requisite is relief from pain and we can give this easily if we go at it in the right way. If we follow the methods usually recommended we shall experience failure—and quite likely lose a patient.

Let me suggest the following simple method: With a piece of cotton wrapped on a wooden splinter gently cleanse the cavity with peroxide of hydrogen, dry the tooth well and then fill it with a pledget of cotton soaked in a 5-percent solution of a 40-percent solution of formaldehyde. Leave this in place for five minutes, remove it again, dry the cavity and fill it tightly with cotton saturated in a good iodoform collodion. Instruct the child to keep his mouth open for a minute or two to allow evaporation of the ether. If the work is well done the little patient will leave the office entirely free from pain. Always insist upon proper dental attention later, for this procedure is, of course, only for

temporary relief. It is poor policy to economize in dental work.

## MORE PICTURES OF DOCTORS AND THEIR HOMES

On this page and the one facing will be seen several pictures of interest to doctors—two of doctors' homes and one of a good doctor and his automobile. The first picture, that of the house with the large veranda is the home of Dr. W. T. Bertrand of Coloma, Mich. The doctor writes: "I have been a subscriber to your journal for nine years and have profited much by its teachings." The other house is that of Dr. M. A. Morehouse of Wevertown, N. Y., who has a short article in this number. The automobile is the property of Dr. John D. Tupper, Westport, Mass., and the doctor is the driver. We are glad to get these pictures—which somehow add a very human touch. It is a pleasure to see how all our good friends look (and our heart goes out to all of them—thousands though there be), and to know where they live—and all about them.

"A little home and a little office where the little granules are much in favor"

Where a whip would be a superfluity.

## THE FAITHFUL HORSE MUST GO

I am using the alkaloidal and active-principle remedies nearly every day and must say that I get fine results. Calx iodata is a dandy in croup.

In this life we get a lot of bitter with the sweet. Yesterday I had to lay away a faithful old friend, my horse, that I had driven fifteen years through storm and sunshine. She was twenty-five years of age. I never had her refuse duty in all the time I have owned her, and only had her off her feet twice and that from no fault of hers. I saw in a journal a few days ago that somehow, somewhere, was a place for the souls of departed animals. I really hope it is so.

I enclose herewith a picture of my "new horse"—and its driver.

JOHN D. TUPPER.

Westport, Mass.

—:o:—

And so it goes! As the faithful old horse goes he is being replaced by the automobile, as shown by the doctor's picture on the preceding page. The procession keeps on moving—such is progress! Other members of the family are studying the auto problem.—ED.

## CASE FOUR: ALOPECIA TYPHOSA

The lift of the hawser, the lilt of the sea,
The roses that clamber o'er bonnie Dundee:
The soft falling twilight, the hush on the lea,
The whippoorwill calling, from far Tennessee.

Here! Hold on there, now! Don't all speak at once. She's only fifteen yet? Doctor, you're ko-rect. She's worth look-

Dr. Clason's "recommend"

ing at twice. When you get that style of goods on your testimonials, you're going some. *That* isn't any old, moldy, back-number congressman, with a bad breath. With something like *that* on the wrapper, almost any old kind of a spieler ought to be good for at least a half gross an hour, right off the tail end of the band-wagon.

I've labelled this article Case 4, because in a previous paper under that number (see the, I think, May CLINIC) I reported my little lady's behavior under typhoid, casually remarking that I'd been medicating a banshee. Now you can see for yourself that it was a mere plain statement of facts. No embroidery about it. Did you ever note that those who are actively delirious (*per contra* to coma vigil) are almost certain to lose their hair? No. 4 stood right up to her record. If there were trimmings and extras went with typhoid, she was right on deck for her share of them. I confidently sailed in after that baldness with my old standby from Bartholow. It's a good one, if it did fail me this time. Here it is:

Fl. ext. pilocarpi .....oz. 1
Tinct. cantharides.....oz. 1-2
Lin. saponis .....ozs. 2 1-2

In this individual case the above appeared to have a boomerang effect, as it were. The hair fell out faster than ever. My patient was getting frantic and I was blueing up some around the gills myself; I saw I was going to have to do a dreadful thing. I was going to have to think! Pardon the immodesty, but for once in my life I believe I thought to some purpose. Besides, the heft of the credit belongs to an article by Robinson in the *J. A. M. A.* I merely made a new use of his receipt. I would also beg leave to state that this solitary once is the only time I've tried it, but it worked so like magic that I couldn't resist the temptation to make a rush order of it. Here it is:

Tinc. hydrastis .....oz. 1
Strychnine arsenate .....grs. 4
Water, q. s. ad.....ozs. 4

M. Fiat lotio. Sig: Use on the scalp, twice daily, morning and evening. This worked fine. The new growth came in soft and silky and just the loveliest glossy black you ever did see.

L. THOMPSON CLASON.

Urbana, Ohio, R. F. D. No. 7.

## THE ABORTION PROBLEM

I have just read in June CLINICAL MEDICINE query 5240 on this subject and also

the answer. Then I turned back to the December issue of last year and reread carefully the article entitled "The Abortion Evil—How Shall We Stop It." Dr. E. P. S. M. of Illinois is passing through an experience very similar to that which has fallen to the lot of most of us in the profession. And we have solved or are trying to solve it, each from his own data.

Looking at it, as I do, from the standpoint of monistic evolution, it seems to me that the roots of this evil, like those of many others in human nature, lie much deeper in our heredity-habits and environment than most writers seem to imagine. More stringent laws regarding the sale of regulators, discouraging the use of catheters or (most cruel of all) refusing to attend on the unfortunates when they do not "get there all right" will no more stop the evil than will prohibitory laws prevent the use of intoxicants. Laws against abortion do not prevent its practice nor even curtail it, we believe, to any appreciable extent.

Ignorance of the natural laws governing our sexual nature is the one primal cause of these evils. Knowledge is the remedy. Nature is our best—our only correct—instructor, and she is always right. "Back to nature" was the cry of the great philosopher Emanuel Kant. "O God, I think Thy thoughts after Thee," said the astronomer Kepler. Now, we all know that God's thoughts or nature's demands concerning our sexual relations are not only not taught in our schools and institutions of learning but they are tabooed by most people, yet they are just as sacred and infinitely more important than a thousand other subjects we study.

Regardless of our customs or age-long habits, nature demands that the sexual organs of both male and female shall be used temperately as soon as they are properly developed. Lack of use here as everywhere else in our human nature produces weakness and atrophy. Excessive use is followed by a train of evils with which, alas, too many are familiar. Use or lose, is nature's law; overuse, i. e., abuse *and* lose, is an equally imperative demand of the infinite. Japan furnishes the best illustration of obedience to these laws, especially sexual and hygienic, as well as the logical results. Call her infidel and heathen, if you will, but results certainly show that from the cosmical viewpoint she is far more faith-filled and orthodox than any of the socalled Christian nations.

In contrast with this, think of the unreasonable, woful, even criminal lack of knowledge possessed by the masses of our people on these subjects. Think of the manner in which these delicate passions are often goaded to an uncontrolable degree by the dietetic and bibulous habits of society; think of the unfavorable business, social, intellectual and especially economic environment of most people; think of these conditions, the millions in sweat-shops, glass, cotton factories, mines, etc., on starvation wages, a prey to the human inhuman vultures; take a calm view of such etiological factors necessarily conservative and logically provocative of illicit sexual indulgence, and it is a wonder that there are not more manifestations of this evil than we now behold. Our last census report compared with those of previous decades shows that the number of women and girls forced to earn a living by gainful occupations is increasing much faster than our population. And the pay of these female laborers does not keep pace with the increased cost of living. The latter has been 33 1-3 percent while the former has been only 10 percent in the last ten years. The temptation to accept help for a "sexual consideration" is stronger now than ever. Moreover, marriages are decreasing relatively to the increase of population.

Then think of the prostitution so prevalent within the marriage relation. But time, patience and space unite in forbidding that we do any more than lift the curtain for a moment. Is there a doctor who has not heard the piteous cry, "I'll never have another?" But when they keep on coming, one every year or two, and health and the many fond hopes and ambitions of youth and early married life vanish in like ratio, and the once happy face takes on the tombstone-look of despair and death, is it any wonder that desperation, for the time

at least, seizes the reins of life and the determination to "do away with it" becomes final?

"I'd rather die than have it" is another expression we have heard from many a girl who has loved "not wisely but too well," for she knows that if she goes to full term the black cloud of social ostracism and disgrace will overshadow her all the rest of life. And the married woman also realizes that another child so soon will go that much farther toward breaking down her already feeble health. So of the two evils or dangerous courses they both choose what they believe to be the lesser; and who can blame them, all things considered? Honestly, Doctor, what would you do if you were in her place? How would you like to have your daughter treated if she had been temporarily overcome at the critical time in the month, perhaps, by some hypnotic fellow, or overpersuaded by specious promises and pleadings? Just put yourself in that girl's position or that overburdened mother's place and have a good heart-to-heart talk with yourself.

It is useless to say she should not have yielded. It's already done and we must take things as we find them. It is easy to say with utopian sex reformers, "Nature has given to every woman the inherent right to decide when she shall bring forth a child and who shall be its father." But under present conditions she is not permitted to exercise that right, though we believe she should and will be sometime in the future.

Talk about prenatal murder! Of course we shrink from it, but what about postnatal slow suicide—the living death that drags itself all through the weary years, every day of which gives birth to the thought, "Better for me if I never had been born," or as Job puts it, "Why died I not from the womb?"

Though nature is prodigal of life, yet in a sense all life is sacred. This sacredness is enhanced as we ascend in the scale of existence, especially after the union of the male and female germs in the womb. Moreover, we believe it should not be disturbed, especially after quickening, except for the best of reasons, and of this the mother should be the judge. If harmless preventatives were more generally used, then the evil in question would be considerably abated.

In conclusion, ordinarily once in four or five years is often enough for a woman to become a mother. We should lessen the quantity relatively and improve the quality of the race. Economic conditions should be so favorable that marriage at sexual maturity should be encouraged. Eugenics should certainly be taught in all our schools. In addition to this I would have a competent physician and his wife permanently in every county-seat for the purpose of giving instruction to the young in every schoolhouse on these all-important subjects. After a few decades of this work the "abortion problem," with the divorce evil and many others so destructive of health, happiness and life, would fade away like mists before the rising sun.

S. J. Brownson.

Fayetteville, Ark.

## THE EXCRETION OF HYOSCINE

A good general will see to it that his lines for retreat are open, remembering the fortunes of war and the perils that always beset the course of an army. So we who believe in the use of drugs, and in mighty potent ones, too, pay close attention to the means of getting them out of the body when their work has been accomplished, as well as to the easy task of introducing them into the economy. In fact, one of the principal reasons we gave for urging the study of the pilocarpine group was that in addition to the almost unequaled power they develop they are phenomenally safe, as they open the doors of elimination and thus ensure their own discharge.

Holzbach (*Medical Record*, July 20, 1907) has studied the excretion of scopolamine (hyoscine) as employed hypodermically in obstretic cases. He finds that the mother's milk responds to tests for this alkaloid up to the third day after her delivery. The first urine discharged by the babe contains it, even when the alkaloid had only been administered to the mother once, a quarter hour before delivery. In the

second urine discharged there was much less, and in the third it could usually not be detected at all.

While the main excretion is probably by the mother's urine, a little is therefore transmitted to the child by the placental blood; and a trace by the mother's milk, for the first three days after birth.

Since all traces of the alkaloid have vanished from the infant's urine by the third discharge, it is obvious that nothing occurring then or subsequently can be justly attributed to a remedial agent no longer present in the infant's system. This will clear up some of the cases where serious symptoms have been noted at such times, and where the physician using the remedy, perhaps for the first time, has been disposed to attribute to it everything that may follow its use. Sequences are not by any means necessarily consequences, although the connection should always be carefully considered.

An ancient maiden lady heard that a friend had suddenly died while partaking of a cup of tea—and she never drank tea thereafter. Of course, we physicians are always—or nearly always—more scientific in drawing inferences (?).

## A SUBSCRIPTION REMINDER

The accompanying item is reprinted from another journal, both because the item itself is good, and because by substituting the words "CLINICAL MEDICINE," and "$1.50," in the right spots it will tell a much-needed story to some of our readers —*you*, perhaps.

"One of these days, maybe today, you will find a red subscription blank in your copy of *Bank Notes*. Investigate it. You know it is a reckless engineer who keeps on running with the 'red against him,' and something always happens when he does. In this case, your subscription to *Bank Notes* will be about to expire, and you will be in danger of its visits being discontinued. If you will just slow down long enough to read the signal, and then lean out and drop thirty cents, we, who are sitting up here in the tower, trying to keep you running smoothly, will swing the semaphore around from red to green, and give you the right of way for another year."

Doctor, we would be greatly pleased to receive the remittance which will entitle you to the "right of way" another year—or if you are not a subscriber the order which will put you "on the main line."

## H-M-C ANESTHESIA IN PRIVATE PRACTICE

I ordered a tube of the new H-M-C compound, carried it in my case three months being a little "leery" to try it. April 10 I was called to attend a middle-sized man, 26 years of age, a coal miner who, upon examination, was found to be suffering with a dislocation of the left hip-joint. It was then 5:30 p. m., so I gave a hypodermic of one tablet, H-M-C compound. Had my supper, returned at 6:30 and found my patient getting drowsy. I gave a few inhalations of chloroform and started to reduce the dislocation. When I was through I found the pulse-rate 60, respiration about normal. Patient slept well until 11:30 p. m., called for his pipe, took a smoke and went back to sleep until 6 o'clock next morning. There were no subsequent symptoms of headache or vomiting, while I was enabled to perform an operation alone which usually requires assistance. The H-M-C compound simplifies matters for the general practician. This has been the only case I have tried it in. I shall let you know my results in the future.

J. C. F. SIEGFRIEDT.

Bearcreek, Mont.

## LORD LISTER AND ANTISEPTICS

We are in receipt of an interesting reprint on "Medical Progress, or Lord Lister and Antiseptics," by E. R. Maxson, M. D., LL. D., of Syracuse, New York. Dr. Maxson is one of the revered fathers of our profession, in which for many years he has played a very important part. In this little booklet, which by the way embodies his remarks made on the occasion of the centennial cele-

bration of the Onondago County Medical Society, he gives some interesting history of the early "antiseptic days"—embodying some of his own reminiscences of those days and of the father of antisepsis—Lord Lister. It is interesting to know that among the earliest publications upon this great discovery were those written by Dr. Maxson himself. We feel sure that readers of CLINICAL MEDICINE will enjoy perusing this little booklet.

## PRELIMINARY PROGRAM OF THE TRI-STATE MEDICAL SOCIETY

The fifteenth annual meeting of the Tri-State Medical Society of Illinois, Iowa and Missouri will be held in the city of Moberly, Mo., Tuesday and Wednesday, September 17 and 18, 1907. The following papers were promised Aug. 1:

Foreign bodies in the esophagus, Dr. W. S. Wiatt, East St. Louis, Ill.

Diseases of the rectum in general practice, Dr. Chas. J. Drueck, Chicago, Ill.

Paper (title not announced), Dr. W. H. Martin, Kahoka, Mo.

Some aspects of pelvic suppuration, Dr. William Felix Garcia, St. Louis, Mo.

Paper (title not sent), Dr. J. P. Webster, Chicago, Ill.

The circulatory system, Dr. M. P. Overholzer, Harrisonville, Mo.

Paper on diseases of eye, Dr. A. E. Prince, Springfield, Ill.

Paper (title not announced), Dr. Bertha Van Hoosen, Chicago, Ill.

Some considerations of the surgery of the female pelvic organs, Dr. F. B. Dorsey, Keokuk, Iowa.

A little talk on surgery, Dr. John B. Murphy, Chicago, Ill.

Should the doctor dispense his own remedies? Dr. W. H. Smith, Kansas City, Mo.

Surgical treatment of ulcus ventriculi, Dr. Carl Beck, Chicago, Ill.

Our knowledge of the etiology of appendicitis, Dr. E. A. Hoefer, Clear Lake, S. D.

Some surgical topics, Dr. T. C. Witherspoon, Butte, Mont.

President's address, Dr. C. F. Wahrer, Ft. Madison, Ia.

Gynecology in its relation to general practice, Dr. H. C. Crowell, Kansas City, Mo.

Has "division of the fee" come to stay? Dr. Emory Lanphear, St. Louis, Mo.

Some observations on ophthalmology, Dr. F. B. Tiffany, Kansas City, Mo.

Those desirous of presenting papers should at once send titles to Dr. C. F. Wahrer, President, Ft. Madison, Ia.

This society is doing splendid work and every physician living in the "three states" of Illinois, Iowa and Missouri should be a member. Write Dr. Lanphear of St. Louis, and send him your application with $3, the amount of the dues. There is every reason to believe that the Moberly meeting will be in the best sense a "winner." Go by all means if you possibly can.

## DISPENSING: WHY I LIKE IT

Everybody is interested and I am interested too. Everybody is having his say, and I must have my say too about the doctor dispensing his own medicines. So please hear me and I shall try to strike the matter at a different point from which others have viewed it.

The truth of the matter is, I have never done otherwise, and have found dispensing an enjoyable, not to say profitable, pastime. Frequently, when I had none to spare, I have taken time to do this work because, as I say, I enjoy it. I have in my office, scales, graduates, mortars, pestles, etc., with which I can do a regular compounding business. If I am in need of a tablet of certain ingredients, I make it, and I can make a nice one too. Then I know just what I have and don't have to depend upon the next man who may be less careful than myself.

Then there is another thing. A doctor sometimes sends a patient to a drugstore with a prescription that makes an unsightly mixture of which the doctor himself would not take one-half. Now for the other: Suppose that this same doctor had a little stock of drugs and tried filling his own prescriptions. He would escape much of this annoyance.

I have had my little experience along this line, and the results were sometimes a concatenation of incongruities that no man could stomach. A little experience in dispensing "would from many a blunder free us and foolish notion."

It is one thing to know drug-action and drug-indication and another thing to prepare those drugs in an agreeable form for administration. To illustrate: I dissolved some of my granules for the baby. His babyship made a wry face and refused to drink his medicine. This was strange to me. The medicine was good medicine, best that's made, and why should he not drink the very best medicine? Anybody's baby ought to drink it, but this baby wouldn't do it and looked at me as if to say, "Taste the stuff yourself." We did taste it and found it very bitter. We had overlooked the fact that strychnine was bitter, so we added a granule of saccharin and a little simple elixir. The baby would have killed himself by drinking all the medicine at a draught if we had let him.

This kind of thing counts for much. It meant failure here, as it does in many cases, and only because we do not taste our medicines before we ask others to do so.

There is another very important matter to be considered along this line and the idea is well illustrated by a conversation we once had with a brilliant physician. He said: "I do not practice scientifically now as I once did but I depend upon the elegant pharmaceuticals that our great drug-houses prepare. I make my diagnosis and write a prescription for the proprietary article that seems to fit the condition best." This is poor practice, irrational practice; to fit it "best" is not to "fit" it at all. It is a lazy way to practise. It saves labor, saves "gray matter" of the brain, in other words, saves thinking, but it does not "save" lives.

Here is my idea about prescribing: Carefully diagnose the conditions, fit the remedy absolutely to these conditions, and gratifying results will follow.

Up in the tall oak yonder is a squirrel. He hops about from limb to limb as if to tantalize us, but our mind is made up what to do. In our hand is a rifle, a long barrel and small bore. It takes a small ball to go down that deadly throat, but we put it home upon a charge of powder. The game is sighted, an unerring bead is drawn—a puff of smoke, the report of the gun, and the game is bagged. This means that neither absolute accuracy, nor even favorable results, can be obtained by a shotgun-prescription of the "very best" thing put up for "general use" by the pharmacies.

This kind of arrangement tends to throw the practice of medicine into the hands of the patients who begin prescribing for themselves from the lists sent out by the wholesale druggists, and one of these druggists can fire a proprietary article at a "disease name" just as well as a socalled doctor, and just as rationally, too. Finally, we were brought up to dispensing and "calculate" that we shall continue that way.

M. G. Price.

Mosheim, Tenn.

## REPORTS OF A SUCCESSFUL MAN

Knowing you appreciate good things when you see them, I send a few items of interest, to you personally, to cheer you on your way.

Perhaps you remember the case I wrote you about in June, 1905, the three-year-old child with ascites, from albuminuria. I placed her on apocynin three times a day, digitalin till the pulse was slowed (from 150 to 100), then on the "trinity" with cactin, a pill of triple arsenates with nuclein every third or fifth day, six one-tenth calomel tablets. A few doses of anasarcin were used, but it did not agree with the child and so was discontinued. Three times in the four months' treatment I gave elaterin, but persisted in the treatment above given, effecting a complete cure of one of the worst cases of dropsy I ever saw in twenty years of active practice. All of my seven colleagues said I had a losing case and were fooling away my time; that the patient would die. They told her parents the same. But she is a living example of alkaloidal treatment. I

also gave 1-6th grain podophyllin granules along with the calomel. Simple, effective, common-sense, rational.

Another. Prepare for a shock—c-r-o-u-p. I shall never again be afraid of croup or calx iodata—the dose especially. A physician of our city called me in to see a child that had been sick with croup for four days and nights. He had suspected diphtheria, and had given the child 3000 units on the second day, and 5000 on the third day, but had received only very little benefit, if any, from the serum. Could see but a straight case of croup. He had been giving a 1-3 grain tablet of iodized calcium every fifteen to thirty minutes all the while, but was losing ground.

I then recommended three tablets of the iodized calcium every thirty minutes. We kept it up all day and till two o'clock at night, when I was called back, finding the child choking to death. I at once gave four grains of iodized calcium in hot water, and in thirty minutes three grains, and three for the next two doses, half an hour apart. Then I gave three granules of apomorphine at one dose, but got no nausea; however the child limbered up for some fifteen minutes, when he commenced to cough up and swallow great mouthfuls of the membrane. I kept up the calx iodata, two grains every thirty minutes, for ten hours. We had relieved the bowels with calomel and castor oil; also gave, after he had begun to get better, one granule of the "catarrh bronchial" combination every two hours.

I am sure, Doctor, that if I had not given the child the thirteen grains of calcidin in the hour and a half he would have died. I am now assured that not enough of the brown iodide being given to saturate the system is the reason that some practicians do not get the results they should. I have controlled cases that I doubted were true croup with smaller doses, yet they have coughed up a membranous substance that is foreign to false croup.

On October 12 I was called to see Mrs. C. I found her suffering with anasarca, legs and body badly swollen, mitral insufficiency, urine loaded with albumin, legs weaping with solid ulceration of the skin, unable to walk. I placed her on three apocynin granules four times a day, with cactin and digitalin three times a day, once a week two granules of elaterin every hour till six were taken, a glass of saline laxative every morning (two heaping teaspoonfuls) and the triple arsenates pill three times a day. January 1 saw her a well woman.

I do not write this in a way of bragging but only to let you know what the active principles can do when judiciously used.

Another, Mrs. F. Was called December 1. Found her suffering with the grippe, three days' standing; fever 103°F., pulse soft and weak. Put her on the dosimetric trinity and ran down the fever in thirty hours. Of course, I gave calomel, but in four or five hours she fell into a low delirium. No fever. I will say that I gave her emetine and apomorphine for the cough and bronchial trouble. I gave some gelseminine for the delirium but got no results. In twenty-four hours she was a raving maniac, as the disease had taken on that type.

I went to St. Joseph for a trained nurse and prepared for battle. I placed my patient on one granule of hyoscyamine, every hour till I get the full effects, also two pills of triple arsenates with nuclein four times a day. I gave 1-3 grain of calcidin every two hours; calomel purges when needed, and intestinal antiseptics to keep clean. Five days later I found my patient rational and easy, without any headache which, as we know, always follows, but inside of thirty-six hours I had a "dead hand" from a blood clot in the brachial artery and surely expected death to follow in a very short time. I pushed the calx iodata, giving 2-3 grain every two hours, to defibrinate the blood and to aid absorption, and gave calomel and salines with cascara for the bowels. Forty hours saw a very bad case of dry gangrene. Braced the heart with digitalin and cactin. Here I began to use echinacea, 20 drops three times a day, but had to drop to 10 the third day.

In two weeks had complete line of demarcation and a very feeble radial pulse, but slowly gaining. As soon as this occurred I took off the fingers above the first joint and the thumb at the first joint, the palmar side of the little finger, as that side of the hand was also involved with a burn from a hot water bag above the wrist. Today she is as stout as ever and the hand the normal size and completely healed except the finger-tips. The patient is 88 years old; she goes where she pleases. Now, is that good or bungling practice? If I had cut off the arm, I am sure she would have died at once. G. W. Whiteley.

Albany, Mo.

—:o:—

Allow us to congratulate you, Doctor. You certainly have been using the arms of precision to good effect; but the good workman provided with effective tools is sure to turn out satisfactory work. We wish we could make the man who refuses to see light use the granules in a rational manner for a few weeks. They would soon find out that medicine is a precise science, and instead of sitting down and complaining that "croup cannot be cured," "pneumonia must run its course," "typhoid will always last four weeks," etc., they would treat pathological conditions with the right remedy repeated to effect, and thus be able to help their patients. However, we must not grumble. Thousands of physicians are working as you and I are working today, and the results are apparent in the reports, a tithe even of which we cannot reproduce in Clinical Medicine.—Ed.

## NOT THE RIGHT WHITTAKER

Ambitious doctors in Cincinnati assert that there is no chance to satisfy their ambitions unless they have a father, brother, uncle or some relative in the holy of holies to "wire" for them. To see that there is truth in this claim one needs but to look over the names constituting our faculties and medical staffs. However true this may be of Cincinnati, it is more so in Philadelphia, which city, Chicago doctors say, is the only one in the United States slower than Cincinnati. In Philadelphia we have Cohens, Mussers, Pancoasts and Da Costas occupying enviable positions even unto the third and fourth generations.

The most decided case of one doctor traveling on another's reputation occurred recently. Dr. H. J. Whitacre, one of Cincinnati's coming surgeons who is "going some," was seeking surcease from surgery at the seaside. He was wired by a Kentucky doctor to come and see a case in consultation with him. Dr. W. pleaded "vacation," but the Kentucky doctor was insistent, saying that no one else could save his patient.

Flattery fanned the doctor's fevered brow and he went. After a tiresome journey he reached the Kentucky doctor and was met with a stare and the exclamation, "You are not Dr. Whittaker."

His patient was suffering from tuberculosis and he was hunting the well-known champion of tuberculin, Dr. J. T. Whittaker, since seven years—deceased!

E. S. McKee.

Cincinnati, O.

## THE TONGUE—AND ACIDS AND ALKALIS

I note in the August number of Clinical Medicine the statement by Dr. J. A. Robertson, of Hot Springs, Ark., that "white tongue indicates alkalis and red tongue acids, in fevers as well as in other diseases, as a rule."

Does the doctor mean to say thereby that a white tongue indicates an alkaline condition of the system or that alkaline medication is indicated, and that a red tongue indicates an acid condition of the system or that acid medication is thereby indicated?

About eight years ago I retired from practice, but have not entirely ceased to observe the curious (to me) sayings of some of the younger ones, now on the carpet. Dr. Robertson is on the right track, but evidently made a misstatement. I am after him. Doctor, kindly tell us through Clinical Medicine just what you mean in the above. As I have another understanding, let us get together.

The American Journal of Clinical Medicine is continually improving in quality of contents. Readers are becoming more alive; writers are more virile, drawing to a keener edge. On arrival of each new number of Clinical Medicine I cannot sleep until I have looked over its entire contents.

A Back Number.

——New York.

—:o:—

Replying to this criticism, Dr. Robertson writes as follows:

"I will say for the doctor's benefit that I have for years been taught, and observation has corroborated that teaching, that a white tongue shows that you have an acid condition of the system, and that consequently alkalis are indicated; and when the tongue is red or dry, or inclined to grow darker and redder as the disease advances, it shows an alkaline condition and acids are indicated. This is no very new thing, Doctor, for I have not only known it for a number of years, but I have successfully put it into practice. I trust this will be sufficiently plain to the doctor. If not, I will cheerfully answer any questions he may see proper to ask."

That seems to answer the question of "A Back Number." The nice compliment to Clinical Medicine by our correspondent we greatly appreciate.—Ed.

## A CASE OF HYDROPHOBIA

Dr. Shaller, in the July number, requests reports of cases of rabies. The following came within my own experience: Probably ten physicians saw the case and all agreed as to the diagnosis of rabies. One morning some ten years ago a man about 26 years of age, good build, low order of intelligence, came to my office, stating that he could not swallow water. He was taken home and ate his dinner very slowly and with some slight effort. He went to bed after dinner and rapidly became paralyzed. He was dead the next day at midnight, thirty-nine hours from the time we saw him. He had delirium; no "bark." This man had no hysteria, he was not even told what his disease was, and did not have enough sense to connect the cat-bite with his condition. If this was not a case of rabies, then what was it?

Mayer Shayer.

Frankfort, Kans.

## CALX IODATA: THE CROUP REMEDY

About fifteen years ago, after having devoted special study to membranous croup for six or seven years, I became convinced that Sir Morrell Mackenzie, however great an authority he might be on diseases of the throat, was mistaken in his assertion that diphtheria and membranous croup were identical and that the earlier authorities, who had stated that the exudate of the latter disease was a fibrinous one, were correct. This conclusion led me to believe that the dreadful mortality of membranous croup could be lowered by the use of a more active alterative than had thus far been employed.

In my readings upon the subject of alteratives I saw a few lines in a medical journal speaking of a "dark iodide of lime." I searched my National Dispensatory and all other books at hand which treated of drugs for some information relative to the remedy, but in vain (and, I am sorry to say, do not even at this late date). Not one of them even mentioned its name. I then wrote to my wholesale house asking for a supply of this substance. They replied by sending me an ounce of yellow iodide of lime, saying they knew nothing of the dark. A trial of this in croup proved it to be no better than other alteratives already used.

I then discovered that the dark iodide of lime had been made for many years by Billings, Clapp Co., of Boston, but that it was an almost unknown remedy and had no sale. I sent for and got an ounce. Specifics in anything are about the rarest things in medicine, but I soon found that if there was a specific, the dark iodide of lime in the treatment of membranous croup deserved that name; and after using this preparation in many cases for fifteen years, without the loss of a single patient,

and with the quick and easy recovery of all, I am convinced that the conclusion was not a mistake.

I determined to bring my experience before the profession, and for ten years repeatedly sent articles to the medical journals of New York, Cincinnati, Philadelphia and Chicago, writing probably twenty articles in all. It was perhaps five or six years before the drug attracted much attention. Then other doctors began to try it and to write about it. During these years, however, I received hundreds of letters asking what the dark iodide of lime was and where it could be obtained. To all of these I replied. For the past ten years many doctors have written of it, and now it has become well known to all doctors who pretend to keep up with the profession. Still, so far as I know, the textbooks, except "Shoemaker's Therapeutics," 6th edition, fail to speak of it. I was disappointed to find that the last edition of the National Dispensatory does not mention it.. By the way, almost all textbooks on any branch of medicine are about ten years behind the best practicians; the journals are easily ten years ahead of them.

It has been one of the pleasures of my life to have been enabled, through the assistance of medical journals, to invite the attention of the profession to this most useful remedy and thus, in a degree, repay for the vast accumulation of knowledge which we all owe to the efforts of our predecessors.

Last year I had the pleasure of having for my guest our esteemed editor, Dr. Waugh. In speaking of the dark iodide of lime and its usefulness, he remarked at our dinner table that he had reports of its use in not less than one thousand cases with scarcely a failure, and that a number of manufacturing houses were making and selling it by the ton under the now well-established name of calx iodata, (or calcidin).

When a student I became convinced that many physicians of even the best reputation were therapeutic nihilists, and my observations brought me to the belief that they were so because they confined their studies to the investigation of *diseases* and to a lamentable degree neglected the study of the best remedies for the cure of the diseases on which they were so well informed. It is time we stopped calling such men good physicians. I determined then that I should not neglect that most useful and important of all subjects—therapeutics. The twenty years I have given to its study have not been a disappointment. I have found that more than one disease which the books say is beyond the help of medicines very promptly respond to them.

V. E. Lawrence.

Ottawa, Kan.

—:o:—

It is a pity that many other physicians, especially those who teach in our colleges and write our textbooks, can not learn the lesson that Dr. Lawrence has—that the study of remedies is just as important as the study of disease, and that the one without the other is practically worthless. If more men were doing this work life-saving remedies like calx iodata would not go begging for years, for some one to use them.—Ed.

## DANIEL BOONE'S OLD HOME

To the stranger passing up the valley of the Femme Osage River in the eastern portion of Missouri the greatest object of interest is the house built years ago by Daniel Boone. Back from the winding valley road at a respectable distance it stands, low-eaved, dingy, massively built, so near the big bluff is it that seen from the west it seems to be entirely within the embrace of the cedar-crowned arms of the rock towering above it. Almost a century old, it is solid-looking and as defiant of the passing of time as its granite background. Here the last days of Daniel Boone were spent, and in the little upstairs room the spirit of the greatest pioneer known in western history winged its way to that world which even he might not explore in the flesh. I want to add that this doesn't mean the old log house first built by Daniel

Boone but the solid old rock house of his son, Nathaniel Boone, in which the old pioneer spent his last days.

But that eventful period has passed long ago and the vicinity is thickly settled. The people are busily engaged in agricultural pursuits, which have developed from a mere planting of a few acres of maize to scientific farming and stock raising. Tenant after tenant the old house has sheltered, including old Dr. J. with his 20-grain doses of calomel, rhubarb and quinine. But as medical science advances, such heroic doses are being replaced by smaller doses often repeated to the desired effect—"dose enough." Calx iodata, calcium sulphide, atropine, aconitine, hyoscyamine, H-M-C, etc., are beginning to prevail, and of these I should like to tell if space in your valuable journal will permit. What about calx iodata?

Case 1. Mr. E., age 45, excessive smoker. He had been treated by three doctors, had no appetite, confined to bed, passing about seventy ounces of urine in twenty-four hours, specific gravity 1010. Diagnosis: Well, what was it? His right leg and buttocks were almost covered with boils and carbuncles. Was it a neurotic glycosuria complication? Xanthoma diabeticorum? Whatever it was, 1-6 grain of calomel followed with effervescent saline laxative every third day, with calx iodata and calcium sulphide for six weeks, cured him.

Case 2. Mrs. Q. Had two miscarriages at eight months, with eclampsia. Had been treated by old physicians. During her third pregnancy I began with saline laxative, with occasional doses of calcalith, and kept it up as needed during the entire period of pregnancy. She gave birth to a 9-pound, girl without any headache or rapid pulse or any signs of convulsions.

I could tell many more triumphs for the saline and alkaloids, but space will not permit. I have had good results with cannabin, gelseminine and hyoscyamine, in ovarian neuralgia. I have used small doses of atropine and emetine in nausea and vomiting, with good results. Copper arsenite in intestinal indigestion gives gratifying results. I have used calcium sulphide in boils and carbuncles with external application of some antiphlogistic preparation and saw them disappear. I have used hyoscine, morphine and cactin (H-M-C, Abbott) in six labor-cases and two curetments, with good results. But as I have deviated from the subject I started I will say in conclusion, I believe the alkaloids have come here to stay, as the old pioneer did.

ARNOLD PERRY.

Hamburg, Mo.

## PROGRESS OF OUR NEW BUILDING

Last month we showed a picture of the work on the foundation of the new building of The Abbott Alkaloidal Company. When that picture was taken the actual construction work had not commenced, though an enormous amount of excavating had been done and many thousands of yards of dirt removed, while the cement foundations were well under way. Lots of work but little to show for it!

Now the building is crawling skyward like our hopes and our ambitions! The brick walls all the way around are up to the level of the main floor; the cement floor in the basement or ground floor has been laid; and the workmen today are erecting the steel forms for the cement pillars which are to support the floors. The floors themselves are to be made of cement which will be reinforced by steel rods interlaced back and forth in such a way as to give them the necessary tensile strength. Practically everything in the building except the window casings will be of brick or of this strong reinforced cement. This is the coming method of construction—indeed it has already "arrived." It is absolutely fire-proof, water-proof, sound-proof, and as firm and solid as "the everlasting hills"—thereby typifying the firmness of the foundation of the alkaloidal movement.

The basement floor will be utilized mainly for storage purposes, while the main floor will be used for the bottling, packing and shipping of goods, with laboratories and other departments above. But the rest—is another

story. As the building grows we shall be eyes for you and tell the story in these columns.

Just remember this, that here is a co-operative industry conducted in the interests

Our new building keeps on growing—58x160, five stories, and fire-proof throughout. Cooperative: doctors for doctors, and for everybody a square deal. Series 3 opens Oct. next. Interested? Write.

of the doctor in which every one may have his share; that it is established as firmly in the hearts of the profession as the rocks from which it is built; that it stands for the right and the right only as fixedly as the uncompromising hearts that have promoted it; and always, as it ever has been, at the very front to do its part and more in the great professional uplift now going on.

## WHEAT DOUGH IN HEMORRHAGE

I find that I can effectually control hemorrhage from any part of the body by the application of wheat dough. My first case was that of a boy about fifteen years old. He was making a cross-bow and his knife slipped and stuck into the inside of his thigh. The hemorrhage was profuse. I applied wheat dough and bandages and the hemorrhage was stopped immediately.

Second case: A young man was shoeing a horse and a nail cut his arm slightly. He was a "bleeder." He tried nearly everything without effect. I was called, used the dough and bandages and there was no further hemorrhage.

Third case: A man had a tooth pulled. He was also a "bleeder." Everything applied failed to give relief. I applied the dough over the gums and cavity and it arrested the hemorrhage.

Fourth case: A man split his shin with an ax. He was out in the woods and had to come home. He had bled profusely before I saw him. I applied the dough and bandage and the hemorrhage was controlled effectually. Don't understand me to oppose tying arteries if you can get hold of them.

Fifth case: The cord snapped off even with belly when a child was born. I applied the dough and bandage and the hemorrhage was stopped.

This dough and bandage can be used on hand, foot or leg very successfully, even in secondary hemorrhages. You "cork up"

everything, so nothing gets from under it. You can take it off and apply a new dressing when you get ready and fear no hemorrhage.

In looking through your May journal, Query 5232, I feel that my dough treatment would have saved that child. Medicines are all right in these cases, but local treatment is the thing. Biscuit dough is what I am talking about.

Some time ago I had a child that had hemorrhage from the umbilicus when three or four days old. I sent the bell of a stethoscope with instructions to bind it over the umbilicus and then melt beeswax and fill it up. I think the top of a saline laxative can applied over umbilicus, a small hole being made in the top and wax poured in ought to be a good treatment. But we don't need any of these things so long as there is any wheat dough in the country! Just give this a trial and see how well you will be pleased. I have been in the practice of medicine since 1860 and have had to make and get up many of the things which I need in practice. A. S. Cook.

Monticello, Ky.

—:o:—

There is nothing like necessity to stir up a man's latent resources. And just because the American country doctor has to "work out his own salvation" in so many of the tight corners, he is the most resourceful physician in the world. The "wheat dough" idea is suggestive. Have others tried it?—Ed.

## A CASE OF ESOPHAGEAL POUCH

The patient, female, age 38, suffering from phthisis, sent for me, as she was suffering from a severe cough. There was a large cavity opposite the third and fourth ribs on the left side and as there was a large quantity of secretion, this cough was naturally thought to be one of the ordinary concomitants of the condition present. A few days after my first attendance after a violent paroxysm of coughing a peculiar-looking yellow mass was expectorated. The cough was better in a few days.

The pathological report was as follows: "Substance expectorated, one and one-half inches long by five-eighths of an inch wide, is cheese. It must have been lodged in some fossa or in a pouched esophagus formed by adhesion to a tubercular gland at the bifurcation of the trachea and after irritation from its presence or during an attack of coughing ejected."

This patient disliked cheese and the last time she had partaken of any was on December 26. The substance was ejected on February 5, so that it must have lain in the pouch for six weeks without giving rise to any symptoms.

The points of interest are the size of the piece of cheese, the length of time it was in the pouch, and the question will arise as to the power of digestion, if any, possessed by the glands with which the esophagus is studded.

William Ayres.

Brierly Hills, Staffs, Eng.

## GLUTEN WAFERS—HOME-MADE

On page 655 of the May number you ask, "Are gluten wafers still sold?" I do not know, for I never have bought any, but have used home-made ones. Mix a thin batter—flour and water; have two hot flatirons; lay one bottom up, hold the other by its handle, then drop a drop of batter on the one bottom side up, and quickly set the other iron on the drop, then take it off, thus making a nice round wafer. When desired for use, dip in water and wrap about the medicine.

Or cut tissue paper one inch square, place the medicine in it, bring the four corners together, twist nicely and cut off the ends with shears; drop in mouth, swallow some water and you will use them often, instead of capsules, for quinine, etc.

W. A. Turner.

Seymour, Mo.

—:o:—

Thank you for this recipe. The tissue paper idea we have advanced ourselves several times and it is unquestionably an excellent method of giving powders or

nauseous medicines to children. It is also a convenient way of exhibiting several granules together.—Ed.

## PREVENTIVE MEDICINE

Our highest aim seems to be at present the study of preventive medicine. We do the interval appendectomy to prevent recurrent attacks which might lead to septic peritonitis from perforation. We do circumcission, anticipating enuresis, masturbation, nervous symptoms and epilepsy. We advise early removal of adenoids to allow normal growth of the palatal, molar and nasal bones and to prevent a long train of symptoms. We employ hygiene to prevent disease. We even induce a mild infection to prevent a more severe one. We inject diphtheria antitoxin as a prophylactic. Calcium sulphide is given to healthy children and adults exposed to pertussis and the exanthemata to prevent the disease in question.

After years of investigation and experiments by scores, yes, hundreds, of clinical and laboratory observers, we have failed to label diseases with their specific therapy. We are prone to expect, as the patient does, that a given pathological entity has a corresponding therapeutical antithesis. We are proud of a few examples, such as mercury in syphilis and quinine in malarial fever, and are thus encouraged to look for others.

Of the specific infections vaccinia is an induced disease. It is not contagious, though it may be communicated by inoculation. By its induction we get an acquired immunity to variola. The former has no mortality; the latter has had a bad record. It is a case of fighting fire with fire; of obviating one disorder by causing another. While it usually runs a mild course, still some cases present a febrile reaction. Given a case of primary inoculation accompanied with fever of 103°-104°F., dry skin, constipation, anorexia and nocturnal delirium, it is our duty to treat the case as it presents.

But the question arises, if we exhibit calcium sulphide as a well-known systemic antiseptic do we lessen the immunity? We think not. Undoubtedly the symptoms abated under appropriate treatment and the characterisitic umbilicated scar appeared. But does the case enjoy the immunity afforded a parallel case not having the febrile syndrome?

We can experimentally inoculate with syphilitic virus and after a few hours rub in well a mercurial and have no evidence of syphilis, because the mercury has been exhibited before the virus is distributed through the body, i. e., while it is yet local and before a primary lesion appears. But if we wait for the period of incubation to supervene, no amount of mercury will *prevent* syphilis. Mercury here will cure but not prevent. Now, if a vaccination lesion is excised or antiseptically treated early, i. e., before its period of incubation, vaccinia does not develop and hence no immunity occurs. But if we exhibit systemic antiseptics after the incubatory period the immunity must still exist. Therefore, we have only relieved the associated symptoms and not impaired the immunizing effect of the vaccinia.

We now recognize no cure for pulmonary tuberculosis, and the "healed in" tubercle is ready to progress and reinfect as soon as favorable conditions are presented. From the studies of Wright we may develop a rational antagonist to the bacillus tuberculosis. If we can increase the opsonin-content of the blood-serum the bacillus is doomed. It is found that a healthy serum has an opsonic index in relation to tubercle bacilli of between 0.80 and 1.20, while the patient infected with tuberculosis of the lungs, bone or other tissue, it may be as low as 0.20 or as high as 2.40. But there must be a corresponding leucocytosis, else the patient is as bad off as if the tuberculo-opsonic index were below normal.

Now, a serum may have a normal tuberculo-opsonic index and yet be subnormal as regards the bacillus typhosus opsonin and thus be capable of inoculation with enteric fever germs, or again, a healthy serum will alter its index as regards a specific bacterium when engaged in fighting another disease.

For example: It has been observed that an attack of erysipelas will cause the sloughing of a sarcoma. Coley's fluid has been

used with some success in the treatment of sarcoma. It is a mixture of the toxins of the bacillus prodigiosus and the streptococcus erysipelatis. May it not be due to the fact that the body, in fighting this toxin mixture, develops an acquired antagonism to the sarcoma—in other words, increases the sarcoma-opsonin and thus rids itself of its host.

These thoughts show the trend of modern medical work and open wide fields of investigation. The art of medicine is yet far removed from the science of medicine; and because we deal with life and its changes and development our work is difficult. As Osler recently remarked: "The thought of the pathologist today is the work of the physician tomorrow." The clinician and laboratory worker must labor together, each comparing notes to reach the highest aim of our profession and for the greatest good of the greatest number.

Frank B. Kirby.

West Philadelphia, Pa.

## H-M-C AND A HAPPY DELIVERY

A few days ago I was called to see a case of obstetrics. The lady was a primipara, twenty-four years old, was anemic, dropsical, with a very bad heart. She began having pains on Sunday forenoon, and I was called Monday morning. She was having pains at intervals of five minutes, but the os did not dilate. During the day and up to ten o'clock the pains grew stronger, were very severe, with but little dilation of os; patient almost exhausted. I gave one half-size H-M-C at 10 p. m. She was sleeping thirty minutes after and was delivered of a fine boy at 2 a. m. Complained some during the last three or four pains. I was delighted and so was the patient.

J. H. Hammond.

Enigma, Ga.

## WORM IN HEN'S EGG

On the afternoon of June 3 a curiosity was brought me in the form of a round worm, about two and a half inches long in a hen's egg. The lady who brought in the specimen, Mrs. N., found it when she broke the egg into a saucer to use in cooking. The worm was in the white of the egg between the yolk and shell.

The worm seems to be one of the hog parasites, ascaris lumbricoides, about a third grown. It is a female, but the eggs are not developed yet. It is easy to see how the hen might get this from the offal of a pigpen, the only danger to its life being in running the gauntlet of the gizzard. When it reached the cloaca it could easily find its way up the oviduct and into the substance of the egg before the shell was formed. If some one had broken the egg and swallowed it from the shell, as is sometimes done, the worm would have been a human parasite. This is the first instance I have known of a parasitized hen's egg.

G. H. French.

Carbondale, Ill.

—:o:—

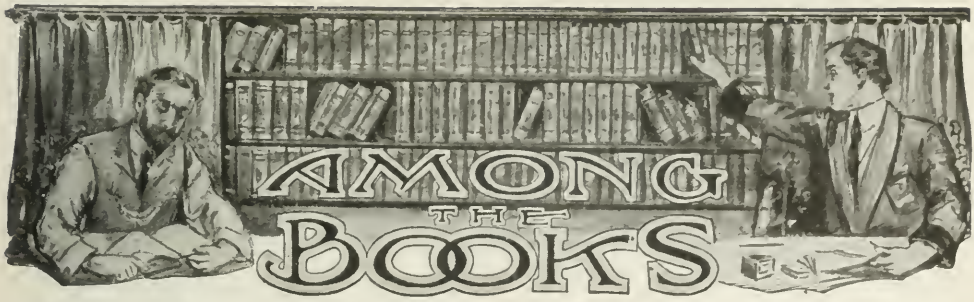
Can any one give a better explanation of this curiosity than that offered by Professor French? One of the bright men in the Clinic office suggests that this hen is violating the Pure Food law and had better look out!—Ed.

## HARRINGTON'S SOLUTION

One of the best antiseptic agents, if not the best, is Harrington's solution. It has this composition:

| | |
|---|---|
| Hydrochloric acid | 60 parts |
| Alcohol (94 per cent) | 640 parts |
| Water | 300 parts |
| Bichloride of mercury | 0.1 part |

Experiments show that this solution will sterilize carbuncle-pus in less than thirty seconds, while it requires tricresol five and one-half minutes, and carbolic acid four minutes to produce the same results. It is especially useful for hand disinfection and for use in preparing the skin for incision. On account of the sublimate it contains it should be preceded by ether and followed by a little plain water.




## RADUE'S "DISEASES OF CHILDREN"

A Manual of Treatment of the Diseases of Children. By W. F. Radue, M. D., published by The Clinic Publishing Company, Chicago, 1907. $1

This small volume is of large contents. It seems to be the result of close study and observation by the author himself in his professional life. The special value of the book is its detailed statements of the application of "dosimetry," or what we know as alkalometry in this country, to the treatment of children.

The subjects treated of are: Clinical examination of children; hygienic points; practical practice points; diagnostic value of special symptoms; diseases of children and their dosimetric treatment; idiosyncrasy of children to certain drugs; table of diseases and drugs used in their treatment; a table of remedies and their doses arranged from the first to the tenth year; index of remedies with dose table.

The book contains 165 pages, and is interleaved with blank paper for notes. Altogether it is a book of modest appearance but of great promise and practical value, and it gives the experience of a man of large practice in actual bedside work. Add it to your library of alkaloidal books.

## LIPPINCOTT'S "INTERNATIONAL CLINICS"

International Clinics, Vol. I, 17th Series. Published by J. B. Lippincott Company, Philadelphia and London, 1907. $2.

This quarterly volume covers every department of medicine and draws upon the utterances of the prominent men in the profession the world over. There is not an article in the present volume that is not of interest either to the general practician or specialist. Yet we shall permit ourselves to call special attention to the article by Warthin on "The Clinical Diagnosis of Enlargement of the Thymus," about which disease we see many references in (chiefly) German medical journals. Of especially up-to-date interest is the article on "Progress of Medicine during 1906."

## STENGEL'S "PATHOLOGY"

A Textbook of Pathology. By Alfred Stengel, M. D., of the University of Pennsylvania. Three hundred and ninety-nine illustrations and seven full-page plates. Fifth edition, thoroughly revised. Philadelphia and London: W. B. Saunders Company. 1907. $5.

This book has been in many reprints before the profession since 1898 and always proved acceptable. That this edition contains the last that the workers in pathology have ascertained or theorized about is a matter of course from a teacher such as is this author.

## FISH'S "VETERINARY PRESCRIBING"

Book of Veterinary Doses, Therapeutic Terms and Prescription Writing. By Pierre A. Fish, D. Sc., D. V. M., Professor at Cornell University. Second edition, revised and enlarged. Published by Taylor and Carpenter, Ithaca, New York. 1906. $1.

A neat octavo volume of 173 pages with flexible red leather binding, filled with

information which a veterinary practician is always in quest of. The author is a careful and accurate writer and alert to the needs of students and practicians. A model to be taken for a handy book for the human physician. A number of blank leaves at the end of the book will be found handy for adding items of current interest.

### WHITING'S "MEDICAL DIAGNOSIS"

Aids to Medical Diagnosis. By Arthur Whiting, M. D., M. R. C. P. New York: William Wood & Company. 1907. $1.00.

This is a small book of 152 pages of about 6½ by 4½ inches, closely yet very clearly printed. It contains a vast amount of matter, clinically rather than pathologically arranged. The author does not deny the possibility of "intuitional diagnosis," but he does not undertake to teach it, and teaches well just what can be taught. A very useful and true aid.

### "DENTAL SURGERY"

Aids to Dental Surgery. By A. S. Underwood, and Dr. Gabell. Second edition. New York: William Wood & Company. 1907. $1

The authors are both English dentists. This little book does not teach the mechanical part of the science but the theoretical parts and especially so far as the present advances in science pertain to the practice of dentistry.

### SALEEBY'S "WORRY"

Worry, the Disease of the Age. By C. W. Saleeby, M. D., F. R. S. New York: F. A. Stokes & Company. 1907. $1.35.

The author of this book has observed life in its multifarious ramifications, and therefore is likely to hit the reader himself or fit a hit on to the reader's neighbor. The book is a stimulus to thinking, and this activity cannot enough be recommended even in our age of boasted intelligence. The book must bring the conviction that humanity is not what it ought, nor even what it can, be; that it is in ruins, beautiful ruins, from which we humans can construct an ideal humanity, and that this ability of constructing is a sure pledge that some day, somewhere, humanity will be raised out of these ruins everywhere.

### McCAW'S "DISEASES OF CHILDREN"

Aids to the Diagnosis and Treatment of Diseases of Children. By John McCaw, M. D. (Edin). Third edition. New York: William Wood & Company. 1907. $1.25.

A handy little volume of 383 pages, clearly printed, containing the latest views and practice recommended. It will benefit the intelligent studious pediatrist as well as the general practitioner to read foreign medical literature and thus to counteract the frequently unhealthy practice of routine.

### KNOPF'S "TUBERCULOSIS"

Tuberculosis, As a Disease of the Masses, and How to Combat It. Fourth issue, revised and illustrated, with supplement on Home Hygiene, etc., etc.

This is the prize essay by Dr. S. A. Knopf, of New York, and published by Fred P. Flori, 514 E. 82nd St., New York. The price is not given, but we should think not less than 25 cents. We feel it in our heart to say that no one who interests himself in the question of this disease will ever acquire the knowledge needed about it without a thorough study of this pamphlet.

### BARTON'S "COMPARATIVE MEDICINE"

Comparative Medicine. By F. T. Barton and Geo. Cresswell, London: Everett & Company. 5 shillings.

This is probably the first book published of its kind. The authors call it "The Elements of the Practice of Comparative Medicine," but the name does not seem to indicate the real subject of the work. It does not point out the similarity of human and brute diseases but the transmission of certain diseases from animal to man. And for this latter point the book is most recommendable, for its fulness, clearness and examples ad-

duced. The subjects most fully treated of are glanders and anthrax; the others are tuberculosis, tetanus, actinomycosis, hydrophobia, foot and mouth disease, ascariasis, trichinosis, malarial fever, dysentery, echinococcus, skin fungi, and snake bite.

## BECK'S "SURGICAL DISEASES OF THE CHEST"

Surgical Diseases of the Chest. By Carl Beck, M. D., of the New York Post-Graduate Medical School and Hospital. Sixteen colored and 162 other illustrations. Philadelphia: P. Blakiston's Son & Company. 1907. $5.

It is unaccountably strange that with all the bold and successful surgery in our modern times on the organs of the chest there should not have been more than one monograph on thoracic surgery before the publication of the book before us. The author, whose surgical operations on the chest-organs were many, felt the anomaly and has met it with the splendid volume before us, a work satisfactory as to subject-matter as well as in mechanical and artistic execution. It contains 348 pages of text, including the departments of the anatomy of the thoracic wall and diaphragm, surgery of the thoracic wall, intrathoracic diseases, value of the Röntgen method in thoracic surgery, and subphrenic abscess and diseases of the breast.

## FERGUSON'S "OPERATIONS FOR HERNIA"

The Technic of Modern Operations for Hernia. By Alexander Hugh Ferguson, M. S., M. D. Illustrated by reproductions of original drawings from the author's collection. Chicago: Cleveland Press. 1907. $5.

This surgical monograph of 366 large quarto pages needs no apology for its existence, but the profession will find that it owes the author hearty thanks for the pains he has taken in writing it. It is the product of modern surgery, which is not as it used to be in our (I should say "my") childhood's bold butchery, but scientific therapy, the therapy of the hand (Greek "*cheir*," i. e., hand), and not of that which the mind alone had reasoned out. This splendid book has an interest not for the specialist alone but for the everyday specialist of general practice, for the details of diagnosis and differential diagnosis and the indications for operation, when and where, will be found nowhere so extensively and lucidly given as here. There is much yet to be commonly known about hernia, and autopsies are not sufficient for this purpose. Here is what the author says on this point: "It is often more difficult to obtain the consent of relatives for an autopsy than it is to secure that of a sufferer for an operation. To operate on all obscure intraabdominal conditions is more praiseworthy than to let a single person die because of failure to operate."

## ROCKWELL'S "ELECTRICITY IN MEDICINE"

The Medical and Surgical Uses of Electricity. By A. D. Rockwell, A. M., M. D. New edition, revised and enlarged. New York: E. B. Treat & Company, 1907. $5.

The present edition is the latest of the many since the book first made its appearance and gained a world-wide reputation long ago both for the now surviving author and his late colleague, George M. Beard. Nothing that had been discovered in electricity in the last few years, and that is much, and which had its therapeutic value tried, or has even only been proposed, is omitted from this great volume. It is safe to say that this work is in the true sense of the phrase "up to date," not only in fashion but in practical usefulness.

## SCHOFIELD'S "HOME LIFE"

The Home Life in Order. By A. T. Schofield, M. D. Funk and Wagnalls Company: New York. 1907. $1.50.

An admirable book on personal and home hygiene, not too scientifically ex-

haustive in the attempt nor too elementary for a youth who is in the middle of his or her highschool course. The author in style and design admirably succeeds in keeping the happy mean between too much and too little. This book deserves to be published in a well-printed, cheap, 25-cent edition and to be distributed gratis or at cost by benevolent persons.

## NAGEL AND PEDERSONS' "NERVOUS DISEASES"

Nervous and Mental Diseases. By Dr. Nagel and Dr. Pederson. Lea Brothers & Company, Philadelphia. 1904. One of their Medical Epitome Series. $1.

An excellent little epitome of this important subject, well suited for the student's use and a good "ready reference" for the physician.

## McCONNELL'S "PATHOLOGY"

A Manual of Pathology. By G. McConnell, M. D., pathologist of St. Louis, Mo. Illustrated. Philadelphia and London: W. B. Saunders Company. 1906. $2.50.

This book contains 496 pages of close but very clear print, and an idnex of 27 pages. Its binding in flexible leather covers makes it very handy for the student. The contents are of course up to date and quite sufficient for reference in study and practice.

## WELLCOME'S "PHOTOGRAPHIC EXPOSURE RECORD AND DIARY"

This is a useful little book, covered in red cloth, with tuck, giving blank pages for the recording of the time and conditions of exposure of a large number of photographic plates, and other data of value to amateur as well as professional photographers. There are tables and other devices for the calculation of the time of exposure and considerable reading matter on the development of plates and other subjects of interest to the photographer. Indeed, the little book is a most valuable one and we can imagine that any one interested in photography will think it worth many times the small price asked for it, which is only 50 cents. Address Burroughs, Wellcome & Co., 45 Lafayette Street, New York City.

## NORTH CAROLINA TRANSACTIONS

Transactions of the Medical Society of the State of North Carolina, 53rd annual meeting held at Charlotte, N. C., May 29 to 31, 1906. President Dr. E. C. Register, Charlotte, N. C.; secretary, Dr. J. Howell Way, Waynesville, N. C.

The book is edited by the secretary. Price not given, but we think it worth as much as a good book of general practice of medicine, surgery and obstetrics. It contains 545 pages of valuable medical matters which are highly instructive just because they come not *ex cathedra*, but from the bedside (truly clinic) practice. Nor are the literary parts of the book of less interest to the educated, devoted practician. The entire volume reflects great credit on our profession in North Carolina and the medical profession of this country has good reason to be thankful for and proud of their brethren in that State.

## LIPPINCOTT'S "THE EYE AND THE NERVOUS SYSTEM"

The Eye and the Nervous System: Their Diagnostic Relation, by Various Authors. Edited by W. C. Posey, M. D., and W. G. Spiller, M. D. Illustrated. Philadelphia and London: The J. B. Lippincott Company. $6.

The undertaking of this work is vast and successfully carried out. It is a book to which the special neurologist will turn for consultation, and the general practician, if he is up to the advances of the profession of today, will not safely neglect it in certain cases of his practice. As a collection of up-to-date neurological and ophthalmological lore the book is unique and the authors and contributors deserve the thanks of the profession for the same.

# CONDENSED·QUERIES·ANSWERED

**PLEASE NOTE**

**While the editors make replies to these queries as they are able, they are very far from wishing to monopolize the stage and would be pleased to hear from any reader who can furnish further and better information. Moreover, we would urge those seeking advice to report the results, whether good or bad. In all cases please give the number of the query when writing anything concerning it. Positively no attention paid to anonymous letters.**

## ANSWERS TO QUERIES

ANSWER TO QUERY 5253.—I have used caulophyllin but once. The patient was a healthy primipara. The os was slightly tense. I gave caulophyllin, gr. 1-6, every half hour until four doses were taken. I observed no effect on the os but I had the most alarming postpartum hemorrhage I have had in twenty-four years' practice.

A. E. SMITH.

Utica, O.

—:o:—

This experience is hardly complete enough to be of much value. Hundreds of physicians have reported good results with this remedy, and nothing in the prior reports would indicate that it acts as a *cause* of postpartum hemorrhage. In all probability this complication was simply an incident in the case and not in any way due to the remedy used.—ED.

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ANSWER TO QUERY 5240.—Tell E. P. S. M. that he will lose nothing in the long run by standing pat against crime of every sort. Shortly after moving to this place nine years ago a gentleman who had passed his three score and ten years solicited my assistance in performing an abortion on a female relative who was unmarried. I tried to let him down easy, but nothing but a flat refusal would do any good. He then jumped to his feet and said: "I don't know what kind of a man you are. What shall I tell the people when they ask about the new doctor?" I replied: "Tell them that you have met one gentleman, one who will not murder an unborn infant for either love or money, one who will plow, grub or do any other hard work before resorting to such crimes to make a living." He left very angry but returned in a good humor and has been my special friend ever since.

J. C. GOSE.

Krum, Tex.

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ANSWER TO QUERY 5258.—This query in the June number of the Journal calls for advice as to the probable financial benefits, which may be derived from the investment in an office electrical equipment. As the editor calls for opinions from the "family" and as I have had quite extensive experience in this line, possibly some facts which I may mention, in a general way, may be of service to the questioner.

The subject, in a general way, like many others, is of a complex nature and does not admit of a ready solution, unless we take into consideration the many important factors which should influence one strongly in his decision as to which is the best course to pursue. Whether a physician wishes to risk the expense, in order to make a demonstration (or "bluff") or whether he wishes to increase his real *efficiency* in alleviating pain are the two important phases which we must consider.

As to the first and less important consideration, nothing need be said. If the physician is conducting this kind of business and seems to be satisfied with it, why, he is privileged to use all the tinsel and show that he can conveniently pile on. It "goes" and many men are making money at it, and are riding in their own autos, while others who are more conscientious are either walking or using the cheaper conveyances. It will be safe for him to stock up and allow the articles to show what he has in the way of showy instruments, provided he does not attempt to use these same instruments in treating his patients. If he is indiscreet enough to attempt such a procedure, it will result in disaster in the large majority of cases, for nothing will "give away ignorance" quicker than a brief experience with a good vigorous static machine. It will make a man look like the "thirty-cent piece" which the kids put on the car track, in the eyes of an observing patient. Besides, he may get a reminding *jolt* from that same instrument that will convince him that "a little knowledge is a dangerous thing."

If on the other hand one really wishes to procure this apparatus, as he would a new instrument, in order that he may increase his efficiency, he may take into account, and profitably too, these few suggestions:

First: He must be of a mechanical turn of mind and an original investigator, as the assistance which he will receive from literature is very meager and unsatisfactory.

Second: He must keep his apparatus in perfect condition, if he would receive from it good results, as the results obtained depend very materially on the condition of his machine, as well as his ability to use it properly. All complicated mechanism needs constant care; if it is neglected it soon gets out of order, and repairs on this class of instruments are very expensive, especially when one has to send to the makers of special types, for their experts to make these repairs. Then the matter of electrodes is no small item, and to be efficient, one must have such as best apply to each individual case, and the ability to devise these helps out a whole lot in the expense side of the ledger. There are some physicians who have a clientele who can afford to pay fancy prices for their treatments, but the average practician has to take cases as they come, and in many instances he cannot charge enough to compensate for heavy expenses, if he has to hire his repairs done.

Third: He must thoroughly understand the principles underlying the application of electricity in the general treatment of both functional and organic conditions in their many phases. A general knowledge of dynamic and static electricity is perhaps not absolutely necessary but of great assistance, as it makes one independent of some socalled experts, who are not in this class at all. This is particularly necessary during certain months of the year, when from atmospheric conditions his static machine will act anything but graciously. A static machine is much like a mule. One may in time get used to its actions, but, like the one who drives this fractious animal, we never conquer it.

Fifth: He must be sufficiently interested in the subject to keep "digging away at it" all the spare time that he has, if he would succeed at it.

I have gone into the details of the subject more fully than was necessary, perhaps, simply to answer the query noted, but I fancy that there are others who have been importuned by alluring literature to purchase these goods, and perhaps might like to hear from the firing-line, rather than from the rear.

Briefly concluding then, let us decide in this way: that if a man is of the right temperament and will keep himself abreast of his calling, he may feel perfectly safe in investing in electric apparatus, as it will bring him in more real money and do it easier than any other method of practice which can be followed, with honor, by the general average of practicians. A static spark will go as truly to its mark, when sent by an experienced operator, as does the lancet, and it is capable of just as spectacular results and often more than the latter much-abused instrument.

If one is not disposed to comply with these requirements, he had best not trouble himself with electricity, as he will not be a success at it.

CHARLES E. BUCK.

Boston, Mass.

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ANSWER TO QUERY 5261.—Were I near the city of Chicago and wished to see the effect of the new anesthetic, hyoscine, morphine and cactin, I should certainly see Dr. Abbott personally. Were I nearer St. Louis, Dr. Lanphear would be my teacher. Were I near Philadelphia and had rectal diseases to treat I should call and see Dr. J. C. Albright, regardless of cost. You will learn a heap in a few minutes by personal contact with these men. And in Query 5261, my choice from personal contact with Dr. Frederick Mueller, 72 Madison St., Chicago, for diagnois. I went to some of the most celebrated surgeons last year from May 28 to July 8, with severe arthritis of the left shoulder. Dr. Frederick Mueller cured it.

CHAS. A. BAILY.

Matchuala, L. L. P., Mexico.

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ANSWER TO QUERY 5271,—Give that boy with seminal emissions 8 to 10 drops of specific thuja three times a day. This has cured for me in inveterate chronic cases. I would never advise such a patient to marry until cured. The above will cure.

DR. HENDERSHOTT.

Mill Shoals, Ill.

—:o:—

We have frequently recommended thuja and have used it in many instances. We find it satisfactory in certain well-defined cases. Specific tincture of staphisagria, one to two drops, is an excellent addition in the majority of instances, and these two remedies, alternated with atropine valerianate, gr. 1-250, and ergotin, gr. 1-6, will nearly always give prompt relief even in most desperate and long-standing cases.—ED.

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ANSWER TO QUERY 5268.—In response to your suggestion at the head of the queries department I would like to offer a little something that may "hit" the case of X. Y. Spec. tinct. lycopus virg., 5 to 15 minims three times a day, is the constitutional remedy to overcome the hemorrhagic condition. At time of the attack 5 minims every fifteen minutes will soon control it. This is not theoretical, but from the experience in a large number of cases, the first one about thirty-five years ago, in the hands of my father. When given in the condition X. Y. describes I have never known it to fail. (i. e., non-tubercular). I have an idea that if X. Y. examines closely he will find a little auricular trouble with the heart. I have no particular theory as to the "modus operandi" of the lycopus, only it "acts." It may do it through the nervous system, coats of the bronchioles, heart or arteries. Never mind that. Try it.

A. P. YELVINGTON.

Binghamton, N. Y.

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ANSWER TO QUERY 5284.—In reply to query 5284 August, 1907, THE AMERICAN JOURNAL OF CLINICAL MEDICINE, page 1062, I will say that the best remedy that I have ever found for constipated babies is a combination of lobelin and podophyllin. I learned this by seeing lobelin highly recommended, and after trying it found it would not do in all cases, and then I combined it with podophyllin and found that it was very reliable.

I give a four to six months' old baby one granule of lobelin, gr. 1-12, with podophyllin, gr. 1-6, once or twice a day as needed; and according to my experience nothing else will do as well. This may seem to be a large dose but in bad cases it takes this amount. This treatment not only gives temporary relief but is curative when continued long enough. In my practice I find that constipation is nearly always caused by a torpid liver and podophyllin will certainly arouse it and act as a purgative. It also has a favorable influence on the sympathetic nervous system. Lobelin increases the secretions, has a favorable influence on the liver and the entire nervous system. It also has a tendency to

prevent griping caused by the podophyllin or a tendency to colic. It is a general relaxant.

JOHN ALBERT BURNETT.

Auburn, Ark.

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ANSWER TO QUERY 5290.—Oh, dear! What a pity it is, that A. M. F. had not been converted to the "alkaloidal religion" before he was called to that case of his. Had he been a devotee to the "clean out, clean up, and keep clean" theory, the first thing that he would have done in the case would be to give the patient a hypodermic of gr. 1-20 of apomorphine. He would have done this before he had taken his coat off, and then set the rest of the house busy preparing for the reception of that after-coming mixture of hell, ham and salt-herring, that was the cause of the discomfort of his patient.

There was no intestinal obstruction, only such as would functionally attend the shutting up of the whole splanchnic area. After the action of the apomorphine had finished a good warm soap-suds enema of about four quarts, to which had been added some glycerin and a little kerosene, would have been his next move. Then, as soon as the stomach had regained its composure, he would have commenced with fractional doses of calomel and podophyllin, followed by a saline laxative and veratrine. Had he followed this routine, it is "dollars to doughnuts" that there would be one less death certificate to his credit in he town records. CHARLES E. BUCK.

Boston, Mass.

# QUERIES

QUERY 5295.—"Acetanilid and Headache Remedies."—G. H. P., Indiana, gives a trying experience which he had in his wife's case after she had taken a "migraine" tablet containing acetanilid, monobromated camphor, caffeine, sodium carbonate and capsicin. There was numbness, vertigo, coldness of the extremities and feeble heart action, which were finally relieved by stimulants.

This gives us an opportunity to call attention to the dangerous practice of giving acetanilid for "any headache." In this formula there is but a small amount of acetanilid and its depressant action is practically corrected by the caffeine and capsicin. But some individuals have a peculiar susceptibility to acetanilid, and it is quite evident that the lady should not have been given this drug at all; in other words, this formula was not indicated; a few doses of papayotin (or other active digestant) and caffeine would probably have served the purpose better, but as we are entirely unfamiliar with the conditions present we cannot make any intelligent criticism. A moment's thought will show however, that the formula of the tablet is almost ideal and usually inoffensive, although, like any other medicine worth calling such, it must be given only *where indicated.* Some day doctors will treat the cause of "headaches" and not be content to merely "choke off" the protesting nerves. One poor woman who had been given acetanilid by the ounce proved, on examination, to have a nasal spur. Yet another had a retroverted uterus and cervical tear. These lesions corrected, the headaches vanished. Don't give acetanilid, unless it is really needed.

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QUERY 5296.—"Local Treatment of Cancer."—G. S. P., Oklahoma, describes a case which appears to be one of cancer, and in the same letter asks us to give our method of treating epitheliomata—skin cancers. This has been given before in this journal and several physicians who have followed the technic report excellent results. The writer has been fortunate enough to cure several cases which had resisted all other treatment. Take of arsenous acid 1 dram, acacia 1 dram, cocaine hydrochloride 2 grains; mix well, add a small quantity of water and rub the paste to a cream. Curet

the growth thoroughly and apply the paste on a piece of rubber-plaster after oozing has ceased, leaving it *in situ* from eighteen to thirty-six hours. It may be necessary to make another application and to use morphine hypodermically to control pain. Upon removing the plaster you will find a black mass surrounded by an inflamed area. Apply hot poultices until this slough comes away and then dress as any clean wound should be dressed. Nuclein powder or bovinine on iodoform gauze will prove efficacious. Be sure, Doctor, to saturate your patient with echinacea from the beginning of the treatment to the end, giving iridin in 1-2 to 1-grain doses three times a day for three days, resting three days, and then repeat. We are now experimenting with a special formula which contains chelidonin, thiosinamin, methylene-blue, extract of viola tricolor, condurangin, etc., and if you feel desirous of making a test of the tablet after the arsenic paste has been used we shall be pleased to have you do so. You must keep up free elimination, and the more nuclein you can get this patient to take the better.

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QUERY 5297.—"Emetine."—"Delirium Tremens." S. M., New York. In answer to your first question I would say that you will find a good deal of difficulty in securing pure emetine, as the drug usually sold under that name is not the pure alkaloid but a mixed product containing the very irritant emetic cephaeline. We have to separate this in our laboratory. Burroughs, Wellcome & Co. advertise the pure alkaloid and we are now experimenting with it. Although I am personally very susceptible to emetics I am able to take seven of the A. A. Co.'s tablets, grain 1-6 each, without nausea if taken in the manner described in our books.

We have received a good many reports of marked success in the treatment of delirium tremens from the use of the anesthetic tablets of hyoscine, morphine and cactin, but, as in eclampsia, we believe that the elimination treatment is preferable, looking upon both as forms of autotoxemia. Nevertheless we can say confidently that these hypodermic tablets will do all that the morphine-chloral combination will, and we believe will prove more effective as well as easier of administration, and much safer.

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QUERY 5298.—"Leprosy." E. J. F., Mexico, inquires concerning the efficacy of nuclein in the treatment of this justly dreaded disease. We have had such reports of undoubted leprosy cured by hypodermic injections of nuclein as to feel fully warranted in advising a further trial of the remedy. Inject one dram hypodermically once a week, gradually increasing the dose until you use an entire bottle at each injection. This is an exceedingly interesting subject, Doctor, and I shall be pleased indeed to hear of your results.

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QUERY 5299.—"Fibroids." E. D. M., New York, wishes to know if there are any remedies which antagonize fibroid growths, and if so, what they are. Some years ago the writer took up this question, and investigated the claims of a number of plant remedies which had obtained some reputation along this line. It was found that every one of these plants contained berberine as its leading active principle. This alkaloid is credited with the singular property of causing contraction of relaxed connective tissues, hence we may see that if given effectively it might well cause contraction of fibroids. Possibly it would do better if at the same time a remedy were administered which stimulated absorption. These new products are generally less resistant than the normal tissue, hence, as in syphilis, we should be able to establish a dosage which would affect the abnormal tissues and not the healthy ones. We have used berberine quite extensively and have learned to look upon it as one of the most certain agencies at our disposal. Its effects, however, are exceedingly slow although enduring. My suggestion would be to administer a grain a day for six to twelve months and not to look for perceptible effects for at least three months. If to this you add calx iodata or phytolaccin, at the same time attending

to the digestive system, etc., I believe the results will be satisfactory. Unfortunately in this day of hustle and hurry people are not always willing to wait so long when surgery offers such quick results.

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QUERY 5300.—"Goiter." Replying to A. C. W., Illinois, we would advise that calx iodata be not given in the exophthalmic variety, as it may make the patient worse. I have used it to some extent in the ordinary form and like it, but it should be pushed to full effect and then sustained just below this for several months.

Phytolaccin goes well with calx iodata (calcidin), in fact, I usually give the two together in goiter and obesity. Push phytolaccin until it commences to nauseate, then keep a little below that point, from three to five grains a day generally being the maximum.

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QUERY 5301.—"Asthma." S. W. B., Texas, asks for an asthma cure. There is no such thing, Doctor. Just now I am trying to see how far the theory can be pushed which attributes this malady to autotoxemia. I am washing out the bowel with repeated enemas, keeping it aseptic with the sulphocarbolates, and restricting the diet carefully as regards nitrogenous foods. At first there is pretty sure to be an aggravation of the malady, with severe headaches as the old deposits in the bowel are melted by increased absorption of toxins into the blood, but within a week things change and usually the results are very satisfactory. This I would suggest as worthy your attention, and I hope to hear of your success.

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QUERY 5302.—"Prices of Plant Remedies." In response to the inquiry of E. W. P., Tennessee, as to the best place to market the crude drugs—the weeds—mentioned in an editorial in CLINICAL MEDICINE, I would say that the prices mentioned were taken from the current market reports in the drug journals. Whether such prices could be secured from the wholesale drug house I do not know. A friend of ours wrote to one of them offering burdock root, which is quoted at thirty cents a pound. All they offered was four and a half cents a pound, but as they seemed quite anxious to get it I judge they would have stood for a good deal better price if it were insisted upon. Send for one of the big drug journals, like *The Druggist's Circular* of New York City. Get from its advertisements the addresses of the big drug houses and write to each of them for offers. You can obtain from the United States Dispensatory directions as to the gathering and preparation of these articles.

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QUERY 5303.—"Gallstones." F. S. T., Texas, wishes to know something of the medicinal treatment of this condition with sodium succinate. I have used sodium succinate for twenty-five years in the treatment of gallstones and have not found a single case where it has failed to cure. The invariable result of its administration is this: The patient takes five grains four times a day for one year; during this time the paroxysms become less frequent and less severe until they cease entirely. Continue the tablets as long as a trace of bile can be found in the urine. It is my conviction that the cure consists in the destruction of the infective germs in the biliary passages and the restoration of a healthy condition, and not at all in the absorption or solution of the stone; in fact, the stone does no harm until the passages become inflamed. If the patients do not understand this, Doctor, they are apt to take the tablets for a week or two, have another spell, and then give them up as failures.

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QUERY 5304.—"Diphtheritic Paralysis." W. V. P., Illinois, asks us to suggest a remedy or remedies for this condition, since he has had several troublesome cases. I would advise the use of brucine, beginning with a granule three times a day and pushing the doses up until he commences to get full effects in the way of twitching. So long as the tonsils are enlarged I would add to the above arsenic iodide, gr. 1-67 four times a day, stopping it whenever the eyes are irritated.

CALCULUS.—Always suspect calculus in hemorrhagic cystitis.—*Lancet-Clinic.*

COPPER ARSENITE often allays irritability of the stomach.—Heinen, *Med. Era.*

THE NOTCHED TEETH of congenital syphilis are frequently absent.—*Lancet-Clinic.*

HERPES ZOSTER.—Is never recurrent; simple herpes is frequently.—*Lancet-Clinic.*

GASTRITIS.—In catarrh of the stomach try juglandin and hydrastinine.—Heinen.

CAFFEINE.—Is more useful as a diuretic than as a direct cardiac tonic.—French, *Merck's Archives.*

IN PRURITUS regions are affected in direct relation to their accessibility to the hands.—*Lancet-Clinic.*

THE GENERAL PRACTITIONER is a good diagnostician.—Joseph Price, *Central States Medical Monitor.*

RAPID PULSE.—A pulse continually above normal, for which no other reason can be assigned, is always tubercular.—Burroughs.

LOSS OF FLESH in an adult, unaccounted for by other symptoms, places the subject under suspicion of tuberculosis.—Burrought.

CERVICAL GLANDS NODULATED IN CHAINS, with enlarged axillary lymphatics, indicate pulmonary invasion.—Burroughs

BISMUTH AND CHALK are liable to form concretions in the small intestines and are therefore dangerous.—Rotch, *American Medicine.*

HYPERACIDITY.—Never give morphine in hyperacidity. Don't give morphine for gastralgia. An emetic is better.—Heinen, *Med. Era.*

HAY FEVER.—Pereira says hay fever begins with irritation of the conjunctiva, and demands protection of the eye against dust.—*Lancet*

ERGOT VS. QUININE.—Ergot is an ideal hemostatic, but as a uterine stimulant it does not approach quinine.—Griffin, *N. O. M. & S. J.*

VOMITING.—For severe nausea or vomiting accompanied by a narrow tongue with red tip and edges try emetine.—Heinen, *Med. Era.*

ANESTHESIA IN OBSTETRICS.—J. W. Hingston says that in obstetric cases he practically always gives some anesthetic.—*The Medical Standard.*

VITILIGO CURED.—Lilly F. Carpenter reports in the *Woman's Medical Journal*, a case of vitiligo cured by direct exposure to the rays of the sun.

MILLINERY IN SURGERY.—There is more millinery about surgery than there used to be.—Chas. P. Noble, *Central States Medical Monitor.*

AUTHORITY.—This journal proposes to follow authority whenever that authority is in the judgment of its editor, right.—*Mobile M. & S. Journal.*

A DIRTY TONGUE and a yellow tint around the mouth and eyes call for podophyllin. Dark offensive stools especially demand this drug.—Heinen.

SIT UP STRAIGHT.—It is simply impossible for the person who "slops over" physically not to do the same stunt mentally.—Foltz, *Ecl. Med. Jour.*

"DOCTOR."—Hobbs (*Gaillard's*) says the title of "Doctor" is now so common in the south that it is no longer distinctive of a medical practician.

LOW PERCENT OF HEMOGLOBIN and reduced count of red cells denote lowered vitality establishing non-resisting power to tubercular infection.—Burroughs.

CHRONIC CYSTITIS.—A case of chronic cystitis of many years' standing found relief from santonin, gr. 1-10, every two hours.—Watkins, *Ecl. Med. Jour.*

ANESTHESIA.—That everybody can get the best results from the anesthetic he most uses shows the value to be attached always to the technic.—*Dental Reg.*

LAW AGAINST SPITTING.—*Southern Medicine and Surgery* says that a Tennessee law forbids spitting and requires factories, stores, etc., to provide cuspidors.

EQUININE.—Contains 81.6 percent of alkaloid, and possesses all the values of quinine without the bitterness and irritating effects on the stomach.—*Merck's Archives.*

CHEWING GUM IN TYPHOID.—*The Medical World* suggests allowing typhoid patients the use

of chewing gum; and there is something in the idea. It is a digestive stimulant.

SUBNORMAL TEMPERATURE of mornings is of as much value in diagnosing tuberculosis as an elevated temperature of evenings.—Burroughs.

LOUISIANA'S NEW PRESIDENT.—Louisiana has elected Dr. Dowling, editor of the medical journal published at Shreveport, president of the State Medical Society.

ECLAMPSIA AND NEURITIS.—C. G. Grulee suggests that eclampsia in the mother may be a cause of "idiopathic" nephritis in the child.—*Arch. Pediatrics.*

MATERIALISM.—I do not believe there are any thoughtful men who are materialists. Let them *think*, and material becomes a plaything for force. —John Uri Lloyd.

IODINE IN TYPHOID.—Perez insists on the beneficial influence of iodine in typhoid fever, which he attributes to its stimulation of phagocytosis.—*Brit. M. J.*

SWEATING WHEN ASLEEP.—The child who habitually sweats upon falling asleep is already tuberculous, no matter how fat or robust he appears.—Burroughs.

ARTERIOSCLEROSIS.—The value of iodides in arteriosclerosis is attributed by Franze, in *Folia Therapeutica*, to its action in lessening the viscosity of the blood.

ATROPINE TO PREVENT GASTRIC ULCER.—As the acid gastric juice prevents healing of a gastric ulcer, restrict its secretion by giving atropine.— —Heinen, *Med. Era.*

MORNING VOMITING.—The morning vomiting of alcoholics is due to chronic gastritis. Give copper arsenite, and emetine gr. 1 at bedtime. —Henien, *Med. Era.*

INTESTINAL ANTISEPTICS.—Stadelmann says small doses of intestinal antiseptics are useless, large ones dangerous. Well, Stadelmann surely has somewhat to learn yet.

TINNITUS AURIUM.—M. G. Price says that morphine relieves him of tinnitus aurium.—*Therapeutic Record.* He should make trial of the less perilous pilocarpine.

OSLER.—An avowed materialist, a scoffer at therapeutics, he has never studied seriously how to do the uttermost for a sick person.—J. Madison Taylor, *Mo. Cyclopedia.*

PODOPHYLLOTOXIN.—W. T. Marrs (*Merck's Archives*) speaks highly of the value of podophyllotoxin as compared with podophyllin—the former is less irritant and more dependable.

AMPUTATION OF THE BREAST.—Out of ten cases of amputation of the breast for carcinoma in 1900, where enlarged supraclavicular nodes were discovered and removed, three remained free from recurrence.—L. S. Pilcher, *Annals of Surgery.*

SMALLPOX.—Calcium sulphide to saturation will prevent pitting, and no other remedy will that I have ever found, when administered internally. —C. S. Moody, *Therapeutic Record.*

ACUTE APPENDICITIS.—Sudden onset of paroxysmal pain, usually in right iliac fossa, tenderness in appendix, abdominal wall rigidity; secondarily nausea, vomiting, etc.—*Lancet-Clinic.*

ATROPINE AND CACTIN.—French tested atropine and cactin as remedies to raise subnormal temperatures, and presents a chart showing the superiority of the latter.—*Ellingwood's Therapeutist.*

PUERPERAL INFECTION.—6,000 women die annually of puerperal infection, and more than twice this number are left by it to eke out a life of chronic invalidism.—G. A. Biddle, *Jour. Kas. Med. Soc.*

BACKACHE OF MUSCULAR ORIGIN.—Many a socalled "backache" from which adults of both sexes complain is to be traced to some kind of muscle derangement.—H. D. Champlin.

THE COMING SPECIALTY.—The scientific application of drugs to relieve and cure disordered function of the human body. There's room for any number of specialists in this branch.

SYPHILIS.—Use mercury iodide for gastric irritability; but not in intestinal irritation, where the chlorides are much better tolerated.—A. N. Aronstam, *Central States Medical Monitor.*

CHLOROFORM AND PERINEAL LACERATIONS.— Rittenhouse says he relies more on chloroform than anything else for the prevention of perineal laceration.—*The Medical Standard.*

MOUTH IN RHEUMATISM.—Pietrowicz urges the importance, in acute rheumatism, of disinfecting the mouth, throat and nose, during and after the attack.—*Chicago Medical Recorder.*

DEATH IN DENTAL CHAIR.—A lady in Garnd Rapids had six teeth extracted under simnoform, recovered but partially and died in the operating chair, on Feb. 22, '07.—*Dental Register.*

BIER (NOT BEER!) TREATMENT.—Allen Staples, in *The Railway Surgical Journal*, gives a very favorable report of his observation on the Bier treatment of infected wounds of the extremities.

NIHILISM.—We can not resist the concusion that the drug-nihilistic idea is the puerile and bigoted product of the childhood of a scientific era.—*Chicago Clinic and Pure Water Journal.*

CONDEMNED FOODS.—While Chicago's food inspectors condemned 67,873 pounds of foodstuffs in the loop during the week ending July 27, they found only 540 pounds at the Union Stockyards.

HEADACHE.—J. M. French says that at no time during twenty years has he suffered so little from

headaches as in the sixteen months since he discontinued the use of tea and coffee.—*Merck's Archives.*

AN EXPENSIVE ERROR.—A Parisian pharmacist whose dispensing error caused death was fined $120, had to pay funeral expenses of $400, and an annuity of $160 per annum to a relative.—*Pacific Pharmacist.*

QUININE IN MALARIA.—D. W. Jones (*Miss. Med. Mo.*) has tried the Galbraith quinine treatment in nine cases of pneumonia, the longest running seven days, the shortest two, and average five.

A GOOD "CHASER."—The water of Potter Springs, Mingo Junction, Ohio, which has the name of removing the craving for alcohol, is now sold by the municipality of the town.—*Chicago Clinic.*

TUBERCULOSIS.—One tuberculous teacher, bank clerk or subject in an office, can communicate the trouble to anybody exposed who is in a reduced state of health.—Burroughs, *Med. Exam. and Pract.*

APOMORPHINE A HYPNOTIC.—Rosenwasser, after full trial, finds apomorphine a prompt, powerful and safe hypnotic, second to none in securing quiet and sleep in acute alcoholism.—*Medical Record.*

DISCREPANCY OF RESPIRATORY MOTIONS on the two sides, dropping of either shoulder, sharp or infraclavicular flattening, frequently escape the notice of physicians, even of consultants.—Burroughs.

THE PRIVATELY OWNED JOURNAL.—Is it a disgrace for a journal to be "privately owned?" Why? The Standard Oil Company may say it is a disgrace for an oil refinery to be privately owned—but is it so?

LOCAL ANESTHESIA has a very high death rate; many mute voices testifying to the incompetency and criminal ignorance of those who have used and are continuing to use cocaine, stovaine, etc. —Cassidy, *Dental Register.*

TUBERCULOSIS.—Woods Hutchinson says that there is infinitely more in pulmonary tuberculosis than can be discovered by the stethoscope. The most important prognostic points come from the heart and the abdomen.—*Ex.*

THE PERUNA "JAG."—DeWitt (*Lancet-Clinic*) mentions two cases of alcoholism from the habitual use of peruna. He doesn't value the consciences of the peruna folks very highly. "Ten thousand such souls could dance on the point of a cambric needle and have as much room as a bullfrog in the Atlantic ocean."

THERAPEUTIC REVIVAL.—We have just passed through an epoch in medicine in which some of the lights of the profession have taught that disease is little or not at all influenced by drugs, and therapeutic nihilism came near prevailing. Today there is a revival of therapeutics and an activity in drug studies such as has not been felt for years.—*The Eclectic Medical Gleaner.* We plead guilty.

MEDICAL ADVANCE.—The physician can aid greatly in the advance of medical knowledge by the collection of data for the use of those whose energy is focused upon teaching or research.—Ward, *Western Medical Review.*

DIGESTIVE TROUBLES.—In *The Therapeutic Digest* for June appears an excellent paper on the treatment of children's digestive maladies in summer, by C. E. Buck, of Boston. The paper was deservedly awarded a prize.

PILOCARPINE.—The sudorific action of pilocarpine should be enhanced by covering warmly, giving hot drinks, and water bottles to the feet. Do not give it in coma as the increase of bronchial secretion might be perilous.—*The Hospital.*

SYPHILIS.—Bloyer (*Ecl. M. J.*) tells of a cure of syphilis by polymnia and phytolacca alternated with calcium sulphide, when mercury and iodine had failed. "These are not always specifics. We have no specifics for disease names."

COMPLICATION OF "SLOW FEVER."—Of course autotoxemia, but sometimes this is very profound and the worst feature of the case, the entire system being so depressed that remedies are not absorbed.—E. H. Winkler, *Med. World.*

CHOREA OF PREGNANCY—Shaw says the chorea of pregnancy is due to a toxin identical with or closely similar to that of rheumatism, and the treatment is elimination as a rule without ending the pregnancy prematurely.—*Chicago Clinic.*

ABDOMINAL PAIN AND PNEUMONIA.—Remember that pain attending chest-inflammation may be referred to the abdomen and produce symptoms closely simulating those of acute peritonitis. Examine for pneumonia.—H. D. Champlin.

ECLAMPSIA.—Comparing morphine with veratrum, J. E. White says the former requires larger doses proportionally to slow the heart, and control muscular spasm, at the same time locking up the secretions, while veratrum loosens them. —*Va. Med.*

DECAYED VEGETABLES—Commisisoner Evans makes a strong appeal to the citizens to aid in the work of stopping the sale of decayed vegetable products by reporting instances to the authorities. It is so much easier to sit down and ask the latter to do it all.

OPIATES IN THE UNITED STATES.—The U. S. now consumes five or six times more opiates than it did six years ago, the average being a dram for each inhabitant; while China consumes 27 grains and Europe 12.—Stockard, *Atlanta Journal-Record of Med.*

PUERPERAL INFECTION.—Why should puerperal infection occur less frequently? Our great grandstand play of asepsis, washing, scrubbing, clean-

ing nails—and before we reach the bed we come in contact with something not aseptic.—Biddle *Jour. Kas. M. S.*

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Increase of the Degenerate.—*The New England Medical Monthly* asks if it is really a calamity that the wealthy and indolent, tainted or degenerate, fail to increase and multiply, and whether it is not better that a virile new stock take up the burden.

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Think for Yourself.—Experience has taught me that we, as practitioners, should have thoughts and ideas of our own, and not rely on the printed opinions of others to the exclusion of our own independence of thought and action.—L. M. Griffin, *N. O. M. & S. J.*

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Surgery at the Cross-roads.—Every doctor should be able to do surgery at the cross-roads, in the cotton gin or sawmill, either by day or by night, with pine tar or tallow dips.—Joseph Price, *Central States Medical Monitor.* (That's where H-M-C comes in.)

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Amebic Dysentery.—Nydigger states that in amebic dysentery, after opening the cecum, irrigations for at least three months, through the opening, are required to rid the bowel of the ameba. The stools should be examined for at least a year.—*W. Virginia Medical Journal.*

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Moliere's Treatment for Syphilis.—
*Clysterium donare,*
*Poste seignare,*
*Deine purgare,*
*Reseignare, repurgare, et reclysterisare.*
—*N. O. M. & S. J.*

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Ether vs. Chloroform.—*The New England Medical Monthly* makes a strong editorial plea for the use of ether rather than chloroform as an anesthetic. In the case of the latter, heart-failure may occur so suddenly and completely that the anesthetist is practically helpless.

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Tennessee Licenses.—Tennessee courts decide that a doctor cannot collect his fees by law unless his license has been recorded in accordance with recent legislation. All must be recorded in full, those issued since Jan. 1, 1901, must be renewed by the State Examining Board.—*Southern Pract.*

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Unusual Causes of Colic.—Colicky pains, chronic or subacute in the abdomen, sometimes called "bellyache," many times will be found to be due to some derangement of the intestinal canal, irritating inflamed mucous membrane, innocent or malignant strictures.—H. D. Champlin.

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Abdominal Seizures and Thrombosis.—In cases of apparent acute abdominal seizures do not hastily diagnose acute intestinal obstruction. Remember there is such a condition as thrombosis or embolism of the mesentery. Examine carefully the heart and blood-vessels.—H. D. Champlin.

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The American Public Health Association meets at Atlantic City Sept. 30 to Oct. 4. An important organization, whose aims meet the approval of everybody, and whose value to the country can scarcely be overestimated. Attend, contribute to the success of this worthy movement.

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Faulty Sewerage.—Today we awake to find that faulty sewerage is coming into its own again; that pathogenic bacteria may be carried in the gas of sewers and that infectious diseases may be transmitted to the household through the poorly trapped drain.—*Chicago Clinic and Pure Water Journal.*

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The Doctor's Fees.—*The Medical Sentinel* calls editorial attention to the necessity of an advance in the fees of the general practising physician. All our necessities have advanced in cost and we must follow suit in justice to our families. As usual, Coe is quick in recognizing the needs of the profession.

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Splenic Abscess.—Surgeon W. H. Bell, U. S. Navy, concludes that splenic abscess is not an uncommon occurrence in malaria, and theoretically should be much more frequent than it is reported. The possibility should not be forgotten, and if an early diagnosis is made, operation offers a fairly favorable prognosis.—*The Military Surgeon.*

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Malarial Toxemia.—My life has been spent in the swamps of Mississippi, and I have learned from experience that magnesium sulphate, chelidonium, chionanthus, warm lemonades with convallaria majalis, atropine and strychnine, when necessary, give better results than turning Saul and David (quinine and mercury) lose.—N. W. Williams, *Ellingwood's Therapeutist.*

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Free Clinic.—On Sept. 24, 25 and 26 Dr. E H. Pratt of Chicago will hold a free clinic in orificial and general surgery, at the Hering Medical College, corner Wood and York Streets, Chicago. Tuition and operation free. Doctors are invited to bring cases, all schools welcome. For particulars address Dr. E. H. Pratt, 100 State Street Suite 1202, Chicago, Ill.

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Morphine Taking.—Lutand says that habitual morphine taking suspends menstruation, taking away the power of conception and sexual desire. Similar results ensue with men. He suggests that these facts may be used in the treatment of women with uterine hemorrhages. This might be a good suggestion were it not that we have remedies more effective and less perilous.

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Knowing too Little or too Much?—What is the use of a student memorizing the botanic and physical properties, preparations, dosage, etc., of hundreds of more or less obsolete and seldom-used drugs? Better let him consult the dispensatories than be a walking one. It is infinitely better that a doctor acquire all our present knowledge of ten or a dozen drugs, say, mercury, digitalis, quinine, morphine, atropine, iron, iodine, nitroglycerin, strychnine, etc., rather than be superficially informed on a myriad.—Spencer,—*Columbus M. J.*

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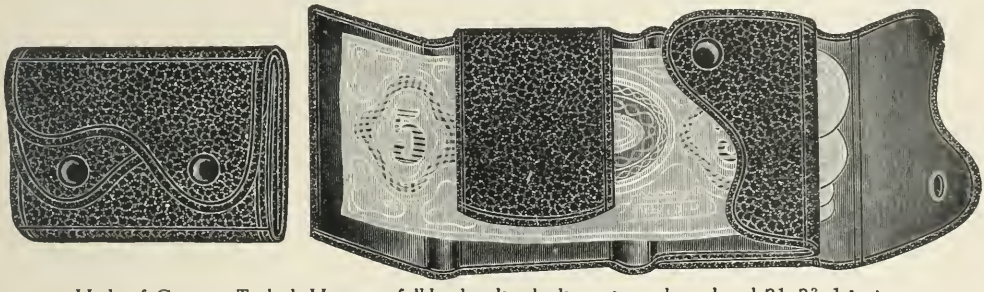

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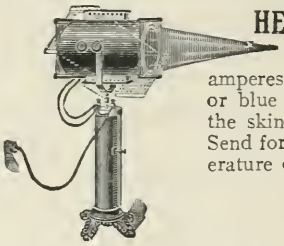

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